United States Environmental Protection Agency
Washington, D.C. 20460

Water Compliance Inspection Report

Section A: National Data System Coding (i.e., PCS)

Transaction Code	NPDES	yr/mo/day	Inspection Type	Inspector	Fac Type
1 N	AK R 0 6 A A 9 4	15 0 8 3 1	~	J	2

Remarks: 21 ____ 66

Inspection Work Days	Facility Self-Monitoring Evaluation Rating	BI	QA	Reserved
67 10 69	70	71	72	73 74 75 80

Section B: Facility Data

Name and Location of Facility Inspected *(For industrial users discharging to POTW, also include POTW name and NPDES permit number)*	Entry Time/Date	Permit Effective Date
Ketchikan International Airport 1000 Terminal Way Ketchikan, AK 99901	9:00 am 8/31/15	4/1/2015
	Exit Time/Date	Permit Expiration Date
	3:20 pm 8/31/15	3/31/2020

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)	Other Facility Data *(e.g., SIC NAICS, and other descriptive information)*
Mike Carney, Airport Director Ketchikan Gateway Borough 907-225-6800 mikec@kgbak.us Jeff Langkau, Maintenance Supervisor Ketchikan Gateway Borough 907-228-6691, Cell: 907-254-0267 jeffl@kgbak.us	SIC 4581-Airports, Flying Fields, and Airport Terminal Services NAICS: 488111-Air Traffic Control Lat/Long: 55.355560°/ -131.713610°
Name, Address of Responsible Official/Title/Phone and Fax Number Mike Carney (same as above) 1000 Terminal Way, Suite 10 Ketchikan, AK 99901	Contacted ☑ Yes ☐ No

Section C: Areas Evaluated During Inspection *(Check only those areas evaluated)*

✓ Permit	☐ Self-Monitoring Program	☐ Pretreatment	☐ MS4
✓ **Records/Reports**	☐ Compliance Schedules	☐ Pollution Prevention	
✓ Facility Site Review	☐ Laboratory	✓ Storm Water	
✓ Effluent/Receiving Waters	✓ Operations & Maintenance	☐ Combined Sewer Overflow	
☐ Flow Measurement	☐ Sludge Handling/Disposal	☐ Sanitary Sewer Overflow	

Section D: Summary of Findings/Comments

(Attach additional sheets of narrative and checklists, including Single Event Violation codes, as necessary)

SEV Codes SEV Description

RECEIVED
SEP - 8 2015
Inspection & Enforcement Management Unit (IEMU)

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Phone and Fax Numbers	Date
Brian Levo	EPA/OCE/ 206-553-1816	9/8/15
Catherine Beatty	ADEC/Anchorage/ 907-269-7560	
Signature of Management Q A Reviewer	Agency/Office/Phone and Fax Numbers	Date
	EPA/OCE/IEMU 3-0955	9/24/15

EPA Form 3560-3 (Rev 1-06) Previous editions are obsolete.

ICIS.
9-14-15

INSTRUCTIONS

Section A: National Data System Coding *(i.e., PCS)*

Column 1: Transaction Code: Use N, C, or D for New, Change, or Delete. All inspections will be *new* unless there is an error in the data entered.

Columns 3-11: NPDES Permit No. Enter the facility's NPDES permit number - third character in permit number indicates permit type for U=unpermitted, G=general permit, etc.. *(Use the Remarks columns to record the State permit number, if necessary.)*

Columns 12-17: Inspection Date. Insert the date entry was made into the facility. Use the year/month/day format (e.g., 04/10/01 = October 01, 2004).

Column 18: Inspection Type*. Use one of the codes listed below to describe the type of inspection:

A	Performance Audit
B	Compliance Biomonitoring
C	Compliance Evaluation (non-sampling)
D	Diagnostic
F	Pretreatment (Follow-up)
G	Pretreatment (Audit)
I	Industrial User (IU) Inspection
J	Complaints
M	Multimedia
N	Spill
O	Compliance Evaluation (Oversight)
P	Pretreatment Compliance Inspection
R	Reconnaissance
S	Compliance Sampling
U	IU Inspection with Pretreatment Audit
X	Toxics Inspection
Z	Sludge - Biosolids
#	Combined Sewer Overflow-Sampling
$	Combined Sewer Overflow-Non-Sampling
+	Sanitary Sewer Overflow-Sampling
&	Sanitary Sewer Overflow-Non-Sampling
\	CAFO-Sampling
=	CAFO-Non-Sampling
2	IU Sampling Inspection
3	IU Non-Sampling Inspection
4	IU Toxics Inspection
5	IU Sampling Inspection with Pretreatment
6	IU Non-Sampling Inspection with Pretreatment
7	IU Toxics with Pretreatment
!	Pretreatment Compliance (Oversight)
@	Follow-up (enforcement)
{	Storm Water-Construction-Sampling
}	Storm Water-Construction-Non-Sampling
:	Storm Water-Non-Construction-Sampling
~	Storm Water-Non-Construction-Non-Sampling
<	Storm Water-MS4-Sampling
-	Storm Water-MS4-Non-Sampling
>	Storm Water-MS4-Audit

Column 19: Inspector Code. Use one of the codes listed below to describe the *lead agency* in the inspection.

A —	State (Contractor)
B ----	EPA (Contractor)
E —	Corps of Engineers
J —	Joint EPA/State Inspectors—EPA Lead
L ----	Local Health Department (State)
N —	NEIC Inspectors
O—	Other Inspectors, Federal/EPA (Specify in Remarks columns)
P—	Other Inspectors, State (Specify in Remarks columns)
R —	EPA Regional Inspector
S —	State Inspector
T —	Joint State/EPA Inspectors—State lead

Column 20: Facility Type. Use one of the codes below to describe the facility.

1 — Municipal. Publicly Owned Treatment Works (POTWs) with 1987 Standard Industrial Code (SIC) 4952.
2 — Industrial. Other than municipal, agricultural, and Federal facilities.
3 — Agricultural. Facilities classified with 1987 SIC 0111 to 0971.
4 — Federal. Facilities identified as Federal by the EPA Regional Office.
5 — Oil & Gas. Facilities classified with 1987 SIC 1311 to 1389.

Columns 21-66: Remarks. These columns are reserved for remarks at the discretion of the Region.

Columns 67-69: Inspection Work Days. Estimate the total work effort (to the nearest 0.1 work day), up to 99.9 days, that were used to complete the inspection and submit a QA reviewed report of findings. This estimate includes the accumulative effort of all participating inspectors; any effort for laboratory analyses, testing, and remote sensing; and the billed payroll time for travel and pre and post inspection preparation. This estimate does not require detailed documentation.

Column 70: Facility Evaluation Rating. Use information gathered during the inspection (regardless of inspection type) to evaluate the quality of the facility self-monitoring program. Grade the program using a scale of 1 to 5 with a score of 5 being used for very reliable self-monitoring programs, 3 being satisfactory, and 1 being used for very unreliable programs.

Column 71: Biomonitoring Information. Enter D for static testing. Enter F for flow through testing. Enter N for no biomonitoring.

Column 72: Quality Assurance Data Inspection. Enter Q if the inspection was conducted as followup on quality assurance sample results. Enter N otherwise.

Columns 73-80: These columns are reserved for regionally defined information.

Section B: Facility Data

This section is self-explanatory except for "Other Facility Data," which may include new information not in the permit or PCS (e.g., new outfalls, names of receiving waters, new ownership, other updates to the record, SIC/NAICS Codes, Latitude/Longitude).

Section C: Areas Evaluated During Inspection

Check only those areas evaluated by marking the appropriate box. Use Section D and additional sheets as necessary. Support the findings, as necessary, in a brief narrative report. Use the headings given on the report form (e.g., Permit, Records/Reports) when discussing the areas evaluated during the inspection.

Section D: Summary of Findings/Comments

Briefly summarize the inspection findings. This summary should abstract the pertinent inspection findings, not replace the narrative report. Reference a list of attachments, such as completed checklists taken from the NPDES Compliance Inspection Manuals and pretreatment guidance documents, including effluent data when sampling has been done. Use extra sheets as necessary.

*Footnote: In addition to the inspection types listed above under column 18, a state may continue to use the following wet weather and CAFO inspection types until the state is brought into ICIS-NPDES: K: CAFO, V: SSO, Y: CSO, W: Storm Water 9: MS4. States may also use the new wet weather, CAFO and MS4 inspections types shown in column 18 of this form. The EPA regions are required to use the new wet weather, CAFO, and MS4 inspection types for inspections with an inspection date (DTIN) on or after July 1, 2005.

NPDES
Inspection Report

Ketchikan International Airport
Ketchikan, AK

August 31st, 2015

Prepared by:

Brian Levo
Environmental Protection Agency, Region 10
Office of Compliance and Enforcement
Inspection and Enforcement Management Unit

Table of Contents

(Unless otherwise noted, all details in this inspection report were obtained from conversations with Jeff Langkau, Mike Carney, or from observations made during the inspection.)

I. Facility Information

Facility Name:	Ketchikan International Airport
Facility Operator:	Ketchikan Gateway Borough
SIC Code:	4581-Airports, Flying Fields, and Airport Terminal Services
NAICS Code:	488111-Air Traffic Control
Facility Contact(s):	Mike Carney, Airport Director Ketchikan Gateway Borough 907-225-6800 E-mail: mikec@kgbak.us Jeff Langkau, Maintenance Superintendent Ketchikan Gateway Borough 907-228-6691, Cell: 907-254-0267 E-mail: jeffl@kgbak.us
Address:	1000 Terminal Way, Suite 10 Ketchikan, AK 99901
Lat/Long:	55.355560°/-131.713610°
Permit Number:	AKR06AA94

II. Inspection Information

Inspection Date:	August 31st, 2015
Inspectors:	Brian Levo, Inspector EPA Region 10, OCE / IEMU 206-553-1816 Catherine Beatty, Environmental Program Specialist ADEC Anchorage, AK 907-269-7560
Arrival Time:	9:00 AM
Departure Time:	3:20 PM

Weather:	Rainy
Purpose:	Determine facility compliance with its National Pollutant Discharge Elimination System (NPDES) permits and the Clean Water Act.

III. Permit Information

Ketchikan International Airport (KIA) is currently permitted under the Alaska Pollutant Discharge Elimination System (APDES) Multi-Sector General Permit for Storm Water Discharges Associated with Industrial Activity (MSGP) with the permit number AKR06AA94 and effective date of 4/1/15. Prior to this coverage the facility was covered by the EPA issued MSGP with the permit number AKR05DC79.

IV. Inspection Chronology

This was an announced inspection. I called Mike Carney, Airport Director, on 8/20/15 and informed him that I would be conducting a routine NPDES inspection of KIA on 8/31/15. I also informed him that an Alaska Department of Environmental Conservation (ADEC) Inspector would be accompanying me during the inspection. Mr. Carney agreed to an inspection at 9:00 am on 8/31/15.

Catherine Beatty, ADEC Environmental Program Specialist, and I arrived at the facility at 9:00 am on 8/31/15. We met both Mr. Carney and Jeff Langkau, Maintenance Superintendent, upon our arrival.

We began the inspection with an opening conference where we presented our inspector credentials and discussed the purpose and expectations of the inspection. We then conducted a records review followed by a site walkthrough and, finally, we held a closing conference to discuss compliance-related concerns. We were accompanied by Mr. Langkau during the entire inspection. Mr. Carney was present for the opening and closing conferences.

I provided Mr. Langkau a copy of the EPA Small Business Resources Information Sheet during the inspection.

We were not denied access to the facility and were allowed to inspect all areas that we requested to inspect.

V. Background and Activity

KIA is located on Gravina Island across the Tongass Narrows from the city of Ketchikan. KIA is operated by the Ketchikan Gateway Borough (KGB). According to facility representatives, stormwater permit coverage extends to the areas inside the KIA fence line which is 286.8 acres in size. The airport and surrounding buffer reserve are

approximately 2,500 acres. KGB owns the main terminal building. All surrounding areas and other buildings are owned by the Alaska Department of Transportation and Public Facilities (ADOT&PF) which leases KIA to KGB. Facility representatives said that ADOT&PF does repaving work at KIA and performs annual site audits per the terms of their lease.

Facility representatives estimated that there are a minimum of 3,000 flights that depart from KIA each year. KGB employs approximately 27 ½ full-time employees at KIA.

According to the facility's site map, KIA is comprised of seven drainage areas that discharge to six outfalls (**Attachment A**). Outfalls A, B, C, D, and E, discharge directly to the Tongass Narrows, while outfall G discharges to Government Creek.

Alaska Airlines, Inc. (AS), is a tenant of KIA and subleases their building and operations space from KGB. AS operations are primarily located in drainage area C with some operations taking place in drainage area D.

Facility representatives said that this was the first stormwater inspection ever conducted at KIA. According to Mr. Langkau, he has been responsible for stormwater compliance at the facility since he came on-board 4 ½ years ago and had previously completed stormwater compliance work for Petrol Alaska prior to working for KGB. Mr. Carney said he has served as the KIA Director for the past 11 years.

VI. Records Review

The following documents were reviewed:

- AKR06AA94 Permit, Notice of Intent (NOI), and Acknowledgement Letter – Copies of these documents were on-file. The NOI was certified by Mr. Langkau and dated 6/29/15.

- AKR05DC79 NOI and Acknowledgement Letter – Copies of these documents were on-file. I noted that the ADEC acknowledgement letter was dated 8/8/13 and the associated NOI submitted by KGB stated that there was no previous NPDES permit coverage. I asked facility representatives if KIA was covered under any other stormwater permit prior to this permit. Facility representatives were not aware of any earlier permit coverage.

- Stormwater Pollution Prevention Plan (SWPPP) – The SWPPP provided by Mr. Langkau was dated 6/9/15, but was not certified. A copy of this SWPPP was submitted to ADEC and is included as **Attachment C** and on the CD attached to this report.

  According to facility representatives, an ADOT&PF contractor composed the original SWPPP as a part of a contract to develop SWPPPs for multiple airports throughout Alaska. Mr. Langkau said he worked with a KGB administrative staff

member to complete the 6/9/15 update.

The SWPPP included the following sections:

- *Site map* – Included as **Attachment A.**

- *Pollution Prevention Team* – This section says that Mr. Carney is responsible for implementing the SWPPP, but Mr. Langkau informed us that he implements the SWPPP and has all other SWPPP responsibilities. Mr. Langkau said that he has considered delegating some of these responsibilities.

- *Potential pollutant sources* - KGB uses urea based deicing solution. Facility representatives estimated that they used approximately 30 tons of urea in 2014, but typically use no more than 50-60 tons annually. At the time of inspection, Mr. Langkau estimated that KIA currently stored a total of 70 tons of urea deicer across dry and liquid forms.

- *Stormwater control measures* - The SWPPP includes spill control measures including developing a spill prevention, control and countermeasure (SPCC) plan, but the facility did not have a SPCC plan or a spill log at the time of inspection. Mr. Langkau said that Aeroservices, Inc. is contracted to fuel the planes and jet fuel spills are not uncommon. He said that the spills are typically less than a gallon, and he has instructed Aeroservices to notify him, the U.S. Coast Guard, and ADEC anytime a spill occurs. The incident is then recorded in an incident report that Mr. Langkau maintains. I informed Mr. Langkau that these procedures were not included in the SWPPP.

  Mr. Langkau said that he conducts half hour annual stormwater trainings for his six maintenance team members. At the time of inspection, there were training logs signed by the maintenance team dated 5/6/14, 5/5/15, and 6/2/15.

- *Schedules and procedures for monitoring* – According to the SWPPP, KGB monitors discharges from outfalls A, B, C, D, E, and G. This monitoring only includes quarterly visual assessments. I asked Mr. Langkau if he was familiar with the ammonia sampling requirement in the subsector S effluent limit guidelines under the AKR06AA94 permit. He said that he was not aware of this requirement, and the SWPPP did not describe procedures for conducting monitoring. Ms. Beatty encouraged Mr. Langkau to contact William Ashton at ADEC for further guidance on this requirement.

  Prior to initially receiving permit coverage under the AKR05DC79 MSGP, KGB analyzed samples from outfall areas A, B, D, and G, on four separate occasions, and compared sample results against the benchmarks identified in subsector S. According to Mr. Langkau, ADOT&PF requested that this be completed to assist in the development of the SWPPP and not because benchmark monitoring requirements were triggered. The sample results are

included in the SWPPP beginning on page 8 (**Attachment C**) and show that sample results did not exceed benchmark concentrations.

The SWPPP does not mention AS or any shared SWPPP responsibilities with tenants. I asked Mr. Langkau if AS was aware that KGB conducts visual assessments of the discharges from the drainage areas that include AS operations. Mr. Langkau said that the KGB benchmark sampling results (described in the paragraph above) were shared with AS, and KGB has discussed where AS can apply deicer. Other than these discussions, Mr. Langkau said there has not been collaboration with AS nor was he familiar with their stormwater responsibilities.

- *Inspections* – Page 19 of the SWPPP states that routine facility inspections are conducted monthly during the deicing season (October-April) and quarterly during other periods. I encouraged Mr. Langkau to consider doing routine inspections monthly all year around given the wet climate of Ketchikan, AK.

  The SWPPP also states that the annual comprehensive site inspection is conducted in March of each year. This would mean that KGB conducts the next comprehensive site inspection in Mar. 2016, and not by the end of the 2015 calendar year as required in the AKR06AA94 permit. I referred to the comprehensive site inspection and annual report date requirements in the AKR06AA94 permit, and informed Mr. Langkau that the SWPPP had not been updated with this information.

- *Reporting, record keeping, and corrective action*
- *SWPPP certification*
- *SWPPP modifications* - The SWPPP modification log did not include the dates or content of revisions made.

- Routine Inspection Reports – Ms. Beatty reviewed the routine inspection reports the facility had on-file dating back to Oct. 2013. These reports were signed by Mr. Langkau. The most recent report was dated 8/19/15 (**Photo 1, Attachment B**)

  The routine inspection reports dated 10/16/13, 11/20/13, 12/20/13, 1/12/14, 2/19/14, and 3/21/14, did not describe the areas or activities that were inspected. Additionally, the report dated 3/21/14 did not include the inspection time.

- Annual Reports – I reviewed the annual reports for 2014 and 2015.These reports were signed and certified by Mr. Langkau. I noted that the comprehensive site inspection date was not included on the 2015 report (**Photo 2**).

  The industrial activity areas included in the comprehensive site inspections were the runway deicer treatment areas, the shop & urea storage building, the Aeroservices tank farm, and AS operations area. I asked Mr. Langkau if AS was aware that KGB's comprehensive site inspections include AS operations. Mr.

Langkau said he did not know if AS was aware of this, and he reiterated that KGB has not discussed any collaborative agreements with AS concerning the comprehensive site inspections or any other stormwater responsibilities. Mr. Langkau said that the comprehensive site inspection of this area is completed outside the fence and not inside the areas leased by AS.

According to Mr. Langkau, the facility has not completed any corrective actions.

Quarterly Visual Assessments – I reviewed the quarterly visual assessments the facility had on-file dating back to Dec. 2013. These visual assessments were conducted at outfalls A, B, C, D, E, and G, in each quarter. Mr. Langkau both conducted and signed each of these assessments.

Each of the different outfall areas were described on separate visual assessment sheets. I noted that the most recent visual assessment of outfall D was not fully completed (**Photo 3**). The assessment stated that outfall D was discharging but the observations of the discharge were not recorded.

I noted that there was not a visual assessment on-file for the first quarter of 2014 (Q1/2014). Mr. Langkau said he was not sure why this was not completed but said it may have been missed since it was within the first year of permit coverage and he was still familiarizing himself with the permit requirements.

- Lab Reports & Chain-of-Custodies (COCs) – The only analytical monitoring completed were samples taken from outfall areas A, B, D, and G, during the development of the SWPPP. COCs showed that sampling was conducted by Mr. Langkau on 3/20/13, 3/26/13, 4/9/13, and 4/17/13. Lab reports showed that samples were analyzed for 5-day biological oxygen demand by R&M Engineering- Ketchikan, Inc (R&M) based in Ketchikan, AK, and analyzed for chemical oxygen demand and ammonia by SGS North America, Inc. based in Anchorage, AK.

  Mr. Langkau said that R&M provided him water sampling training and he borrowed a pH meter from a KGB wastewater plant to analyze samples. He said that he kept the pH meter during the entire month in which the four samples were completed. There were no pH meter calibration records available at KIA, and Mr. Langkau said he did not recall ever calibrating the device during the time it was in his possession.

VII. Facility Review

We began the facility review in drainage area E (**Attachment A**). This area included the Airport Rescue and Firefighting (ARFF) building and fueling area, the Snow Removal Equipment, Sand, and Chemical Storage (SRE) building, and the overhang portion of taxiway A. Most of the outside areas were covered in gravel, with the exceptions of taxiway A, the fueling pad next to the ARFF, and the area on the west side of the ARFF

building, which were all paved impervious surfaces.

Outfall E was located directly southeast of the SRE building. There were two pipes at outfall E (**Photo 4**). Mr. Langkau said that the darker pipe drains stormwater from the areas surrounding the ARFF and SRE buildings, while the lighter colored pipe drains stormwater from Taxiway A. Mr. Langkau said that this discharge point used to be one outfall until 2006 when a second pipe was installed. He said that he collects a sample comprised of drainage from both pipes and records that as his outfall E sample. I noted that the SWPPP and site map do not reflect the drainage from the taxiway to outfall E, nor do they include a second outfall pipe at the outfall E location. Mr. Langkau said he plans to treat this outfall as two separate outfalls for future monitoring purposes.

Stored inside the SRE building were sacks of dry urea (**Photo 5**) and a mixing tank used to make the deicing solution. A spill kit was located next to the mixing area and contained absorbent socks and pads in addition to other materials. There was a trench drain on the floor in this area that Mr. Langkau said routes to an oil-water separator before entering an underground holding tank.

Along the outside of the northeast wall of the SRE building were totes that contained 3% urea deicing solution (**Photo 6**). At the east corner of the SRE building was a 55-gallon drum stored outside and without secondary containment (**Photo 7**). Mr. Langkau said that this drum holds antifreeze used for the KIA ferry which is operated by KGB. He said that the drum was left outside accidently. To the east of this area was a steep vegetated embankment. At the bottom of the embankment was the KIA fence line, with the terminal access road beyond the fence, and the Tongass Narrows beyond the road. Mr. Langkau said that some of the stormwater from the gravel yard on the east side of the SRE building flows down this embankment and discharges outside of the KIA fence line (**Photo 8**).

The ARFF building is separated into two areas, a vehicle maintenance shop where the facility conducts maintenance on KIA's vehicles, and an ARFF dry bay (**Photo 9**). Mr. Langkau said that the vehicle shop contains a couple of drains that route to an oil-water separator buried outside of the ARFF building and near the steep vegetated embankment (**Photos 10 & 11**). He was not sure if the oil-water separator discharges, but said he suspected that it does discharge and drainage ultimately flows down the embankment. Page 5 of the SWPPP says that the drains from the vehicle shop discharge under the gravel fill to the east of the ARFF building (**Attachment C**).

At the northeast corner of the ARFF building was an excavated area of gravel with an exposed pipe entering a larger metal pipe that led east towards the vegetated embankment (**Photo 12**). Mr. Langkau said that these pipes used to drain the ARFF dry bay, but the larger pipe is now filled in so no washdown or other fluids are routed through this system, hence it is now a dry bay used to store ARFF vehicles and equipment. At the northwest side of the ARFF building was a fueling station with a spill kit (**Photo 13**). The fuel tanks were stored belowground and there did not appear to be any oil sheen present in this area.

Mr. Langkau showed us the two floor drains inside the ARFF building vehicle shop (**Photos 14 & 15**). KIA has 12 vehicles that weigh one ton or less and 14 vehicles larger than one ton. There were oil and lubricant drums and cans being stored in proximity to one of these floor drains (**Photo 16**).

Next, we drove to drainage area A which receives stormwater from the northwest portion of the runway (**Attachment A**). Mr. Langkau said that the runway is crowned in the middle, so the southwest half of this area drains to outfall A and the northeast half drains to outfall B. According to Mr. Langkau the only industrial operations occurring in this area are runway deicing and maintenance. He showed us the approximate area where he samples for outfall A at a small channel of stormwater flowing along the western fence line towards the northwest corner (**Photo 17**). The ground at the northwest corner of the KIA property was saturated with water and appeared to have standing water present.

We then traveled to drainage area F which contained a portion of the runway, as well as a gravel access road to two U.S. Federal Aviation Administration (FAA) buildings (**Photo 18**). Mr. Langkau said that this was the only drainage area that is not sampled due to the fact that stormwater infiltrates into the gravel and vegetation in this area, and there are no storm drains, culverts, ditches, or other discrete conveyance systems for stormwater. He said that the FAA buildings only store dry materials such as signage.

Drainage area D included the paved plane tie-down area, a portion of the taxiway, and the apron and buildings on the east side of the main terminal building. Mr. Langkau also showed us the tank farm managed by Aeroservices (**Photos 19 & 20**). The tank farm included four large tanks of jet fuel and a tank of diesel fuel. I noted that the area smelled strongly of fuel. The tanks were stored inside of a concrete secondary containment system with drains that route to a 10,000 gallon oil-water separator (**Photo 20**). There was a storm drain outside of the secondary containment area (**Photo 19**). Mr. Langkau was not sure if the oil-water separator tank discharges, and whether the stormwater drain in **Photo 19** routes to outfall D. Stormwater was pooled on the northeast side of the tank farm but a slight berm along the fence line appeared to prevent it from discharging off-site (**Photo 21**).

Facility representatives said that the tank farm was not included in KGB's stormwater responsibilities since it is managed by Aeroservices. The tank farm is not described in the SWPPP nor are details of its stormwater drainage included on the site map. However, KGB does include the tank farm in its comprehensive site inspections (**Attachment D**).

Outfall D is a culvert northwest of the tank farm, under the fence and air terminal road and into the Tongass Narrows (**Photo 22**). Access to the outfall is affected by the tide and could not easily be reached at the time of inspection.

We then reviewed outfalls B and C. Drainage area B includes portions of the northwest section of the runway and taxiway. Mr. Langkau said that he samples outfall B as it exits the culvert at the KIA fence line and enters a rip rap ditch that extends to a culvert and ditch system routing to the Tongass Narrows (**Photo 23**).

Drainage are C is comprised of portions of the airport apron and taxiway (**Photo 25**). According to Mr. Langkau these are the areas where AS operations take place. A trench drain extends along the entire airport apron and routes stormwater into a 10,000 gallon oil-water separator. Outfall C is the discharge of stormwater from the oil-water separator (**Photo 24**). Mr. Langkau was not sure where the discharge from outfall C routes after the sampling point, but it appeared that it flows to a ditch that is linked to the same culvert and ditch system that the outfall B discharge enters before flowing into the Tongass Narrows.

VIII. Observed Discharge

I observed discharges from outfalls A, B, and C, at the time of inspection. Due to the amount of time that would have been necessary to reach outfall G, we did not inspect outfall G or its associated drainage area at the time of inspection.

IX. Receiving Water

The NOI submitted to ADEC identifies the Tongass Narrows, Government Creek, and Airport Creek as receiving waters, however, the SWPPP and site map only identify the Tongass Narrows and Government Creek as receiving waters. It is unclear where Airport Creek is located and if it receives discharges from KIA.

X. Areas of Concern

A. Permit Coverage Prior to 2013

The ADEC acknowledgement letter for the AKR05DC79 permit was dated 8/8/13. Facility representatives said that they were not aware of any earlier NPDES stormwater permit coverage of KIA and there were no records of permit coverage prior to the AKR05DC79 permit on-site.

Considering Mr. Carney has served as the KIA Director for the KGB over the past 11 years, it appears that KIA was unpermitted prior to the AKR05DC79 MSGP.

B. SWPPP Content Missing or Not Current

Section 5.2.7 of the AKR06AA94 permit states "A permittee must sign and date the SWPPP…including the date of signature."

At the time of inspection, the SWPPP on-file was not certified.

Section 5.2.6.1 of the AKR06AA94 permit states that the SWPPP must document "Procedures for preventing and responding to spills and leaks."

At the time of inspection, the facility did not have a SPCC plan or a spill log. Mr. Langkau described spill clean-up procedures that are implemented by KIA and Aeroservices, but this information was not included in the SWPPP.

Section 5.2.3.3 of the AKR06AA94 permit states that the site map must include "locations of all receiving waters in the immediate vicinity of the permittees facility…locations of storm water inlets and outfalls, with a unique identification code for each outfall…and an approximate outline of the areas draining to each outfall." As well as the locations of liquid storage tanks.

The NOI submitted to ADEC identifies the Tongass Narrows, Government Creek, and Airport Creek as receiving waters, however, the SWPPP and site map only identify the Tongass Narrows and Government Creek as receiving waters. It is unclear where Airport Creek is located and if it receives discharges from KIA.

There were two pipes at outfall E (**Photo 4**, **Attachment B**). According to Mr. Langkau the darker pipe drains stormwater from the areas surrounding the ARFF and SRE buildings, while the lighter colored pipe drains stormwater from Taxiway A. Neither the SWPPP nor the site map show that drainage from the taxiway flows to outfall E, nor do they include a second outfall pipe at the outfall E location.

Section 5.3.1 of the AKR06AA94 permit states "The SWPPP must document the procedures for performing facility inspections specified by this permit..."

At the time of the inspection, the SWPPP did not include the changes to the comprehensive site inspection deadline requirements under the new MSGP.

Section 5.4.1 of the AKR06AA94 permit states "The SWPPP must document the procedures for performing facility monitoring specified by this permit..."

At the time of inspection, facility representatives were not familiar with the ammonia effluent limit guideline requirements, nor did the SWPPP describe procedures for conducting this monitoring.

Section 5.6.4 of the AKR06AA94 permit states "A permittee must keep a log showing dates, name of person authorizing the change, and a brief summary of changes for all significant SWPPP modifications…"

At the time of inspection, the SWPPP modification log did not include the dates or content of revisions made.

C. Airport Tenants not Described in SWPPP

Section 11.S.3.3 of the AKR06AA94 permit states:

> "The airport authority, in collaboration with its tenants, may choose to develop a single comprehensive SWPPP, or they may choose to develop individual SWPPP…If any operator develops a SWPPP for discharges from its own areas of the airport, that SWPPP must be coordinated and integrated with the comprehensive SWPPP. All operators and their separate SWPPP contributions and compliance responsibilities must be clearly identified in the comprehensive SWPPP…For each activity that an operator (e.g., the airport authority) conducts on behalf of another operator (e.g., a tenant), the comprehensive SWPPP must describe a process for reporting results to the latter operator and for ensuring appropriate follow-up…"

AS and Aeroservices both operate at the KIA airport, but neither are mentioned in the SWPPP, nor are their operations detailed on the site map. The quarterly visual assessments Mr. Langkau conducts include discharges from drainage area C where AS operations occur. Similarly, the comprehensive site inspections included both AS operations and the Aeroservices tank farm (**Attachment D**).

Facility representatives said that KGB has not discussed developing a comprehensive SWPPP, or SWPPP responsibilities in general, with AS. Mr. Langkau said that he had no knowledge of how AS implemented their SWPPP.

It appears that KGB should work with AS to develop a comprehensive SWPPP that covers the entirety of the industrial operations occurring at KIA. Also, it is unclear if the Aeroservices tank farm qualifies for stormwater coverage under the MSGP and whether Aeroservices should be considered a tenant.

D. Routine Inspection Reports Incomplete

Section 4.1.2 of the AKR05DC79 permit states that the permittee must document "The inspection date and time…" and "…Any control measures needing maintenance or repairs;" in the routine facility inspections.

The routine inspection reports dated 10/16/13, 11/20/13, 12/20/13, 1/12/14, 2/19/14, and 3/21/14, did not describe the areas or activities that were inspected. Without this information it is unclear if and where control measures were evaluated. Additionally, the report dated 3/21/14 did not include the inspection time.

E. 2015 Comprehensive Site Inspection Report Incomplete

Section 4.3.2 of the AKR05DC79 permit states that the permittee must document "The date of the inspection…"

The comprehensive site inspection date was not included on the 2015 report (**Photo 2**).

F. Quarterly Visual Assessments Reports Missing or Incomplete

Section 4.2.1 of the AKR05DC79 permit states that once each quarter the permittee "must collect a stormwater sample from each outfall…and conduct a visual assessment of each of these samples."

Section 4.2.2 of the AKR05DC79 permit states that the permittee "must document the results of your visual assessments and maintain this documentation onsite with your SWPPP…"

Each of the different outfall areas were described on separate visual assessment sheets. I noted that the most recent visual assessment of outfall D was not fully completed (**Photo 3**). The assessment stated that the outfall was discharging but the observations of the discharge were not recorded.

I also noted that there was not a visual assessment on-file for Q1/2014.

G. Sampling Conducted During SWPPP Development

Section B.10.B. of the AKR05DC79 permit states that the permittee "must retain records of all monitoring information, including all calibration and maintenance records…and records of all data used to complete the application for this permit…" **Section B.10.D.** continues that "Monitoring must be conducted according to test procedures approved under 40 CFR Part 136…"

The only analytical monitoring completed were samples taken from outfalls A, B, D, and G, during the development of the SWPPP. COCs showed that sampling was conducted by Mr. Langkau on 3/20/13, 3/26/13, 4/9/13, and 4/17/13. Mr. Langkau said that R&M provided him water sampling training and he borrowed a pH meter from a KGB wastewater plant to analyze samples. He said that he kept the pH meter during the entire month in which the four samples were completed. There were no pH meter calibration records available at KIA, and Mr. Langkau said he did not recall ever calibrating the device during the time it was in his possession.

H. Quarterly Visual Assessments not Representative of all Discharges

Section 6.2.1 of the AKR06AA94 permit states "Once each calendar quarter…the permittee must collect a storm water sample from each outfall…and conduct a visual assessment of each of these samples. These samples…should be collected in such a manner that the samples are representative of the storm water discharge."

At the time of inspection, Mr. Langkau said that he collects a single sample composed of drainage from both pipes discharging at outfall E (**Photo 4**), but plans to treat this outfall as two separate outfalls for future monitoring purposes.

Mr. Langkau also said that some of the stormwater from the gravel yard on the east side

of the SRE building flows down the steep vegetated embankment adjacent to the building and discharges outside of the KIA fence line (**Photo 8**).

The samples collected at outfall E are not representative of all the stormwater discharges from drainage area E.

I. Secondary Containment

Section 4.2.4.2 of the AKR06AA94 permit states that the permittee must implement "Procedures for material storage and handling, including the use of secondary containment barriers between material storage and traffic areas…"

At the time of the inspection, there was a 55-gallon drum stored outside and without secondary containment at the east corner of the SRE building (**Photo 7**). Mr. Langkau said that this drum holds antifreeze used for the KIA ferry which the KGB operates. He said that the drum was left outside accidently.

J. Potential Process Wastewater Discharges

Section 1.2.2.3 of the AKR06AA94 permit states that it provides coverage for "Discharges that are not otherwise required to obtain APDES permit authorization but are commingled with discharges that are authorized under this permit…"

The ARFF vehicle shop contained two floor drains with oil and lubricant drums and cans being stored in proximity to one of them (**Photos 14-16**). Mr. Langkau said these drains route to an oil-water separator buried outside of the ARFF building and near the steep vegetated embankment to the east of the building (**Photos 10 & 11**). He was not sure if the oil-water separator discharges, but said he suspected that it does discharge and drainage ultimately flows down the embankment. Page 5 of the SWPPP says that the drains from the vehicle shop discharge under the gravel fill to the east of the ARFF building (**Attachment C**).

Any discharges from inside the shop are not covered by the MSGP, but it is unclear if outflow from the oil-water separator discharges offsite.

XI. Closing Conference

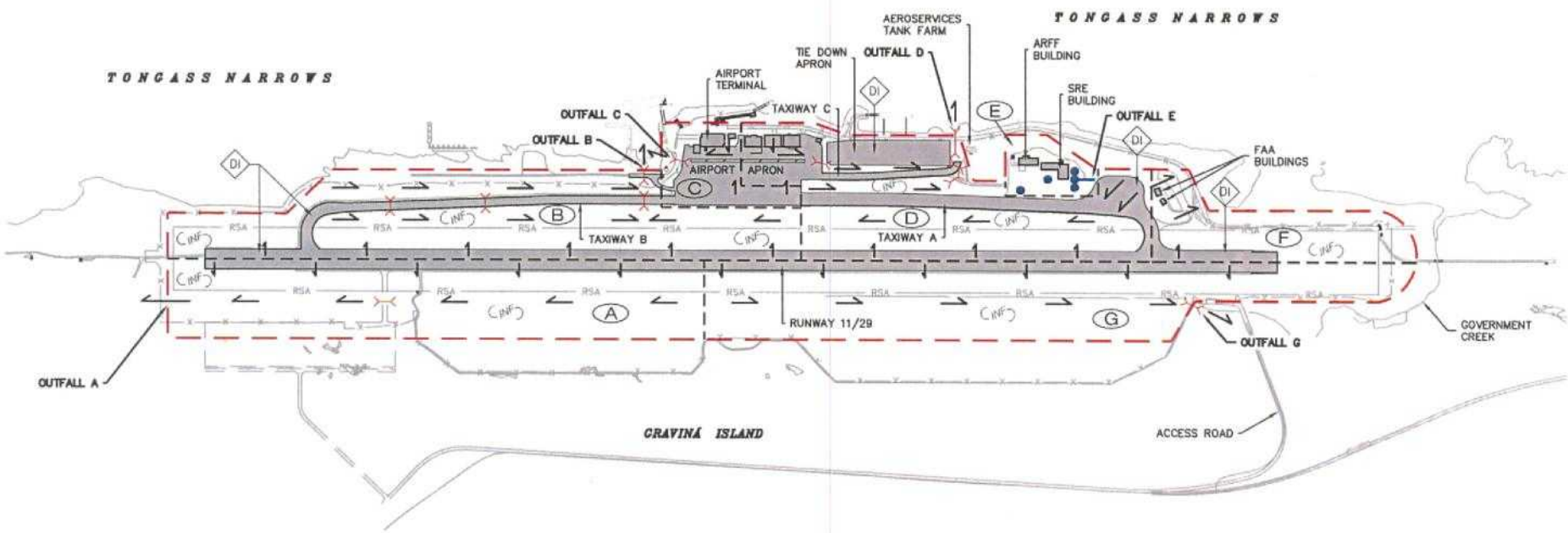
A closing conference was held with Mr. Carney and Mr. Langkau at the end of the inspection to discuss our observations. We identified all of the areas of concern listed above, with the exceptions of discussing SWPPP responsibilities of Aeroservices and the tank farm, and discharges from the gravel area surrounding the SRE building. We then thanked them for their time and assistance with the inspection.

Report Completion Date: 9/22/15

Lead Inspector Signature: _____

ATTACHMENT A

Site Map



ITEMS AND ACTIVITIES LOCATED AT THE KGB FACILITY:

ARFF BUILDING
- VEHICLE FUELING
- MAINTENANCE AND CLEANING
- SPILL KIT
- VEHICLE AND EQUIPMENT STORAGE
- 4,000 GAL UST - DIESEL FUELING OPERATIONS
- 1,500 GAL UST - GASOLINE FUELING OPERATIONS

AIRPORT TERMINAL
- 4,000 GAL AST - HEATING OIL FOR BUILDING

SRE BUILDING
- UREA STORAGE
- MAINTENANCE AND CLEANING
- SPILL KIT
- 2,000 GAL AST - HEATING OIL FOR BUILDING
- VEHICLE AND EQUIPMENT STORAGE
- SAND STORAGE
- SALT STORAGE

NOTE: CATCH BASIN AND CULVERT LOCATIONS ARE APPROXIMATE.

LEGEND

- SWPPP Boundary (Area = 286.8 acres)
- Culvert
- Subsurface Piping
- Drainage Direction
- Drainage Area Boundary
- AIRPORT SECURITY FENCE
- Impervious Area (Area = 61.36 acres)
- Drainage Area
- Infiltration Area
- Catch Basin
- Deicing Locations
- TRENCH DRAIN

400 0 800

GRAPHIC SCALE
1"=800'

ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
KETCHIKAN AIRPORT
STORMWATER POLLUTION PREVENTION PLAN

SITE PLAN

KETCHIKAN, ALASKA

RESTORATION Science & Engineering, LLC
911 West 8th Avenue, Suite 100
Anchorage, Alaska 99501
PH (907) 276-1023 FAX (907) 277-5718

JOB NO: 12-972 | DRAWN: MBB
DATE: 04-15-2013 | CHECKED: MW

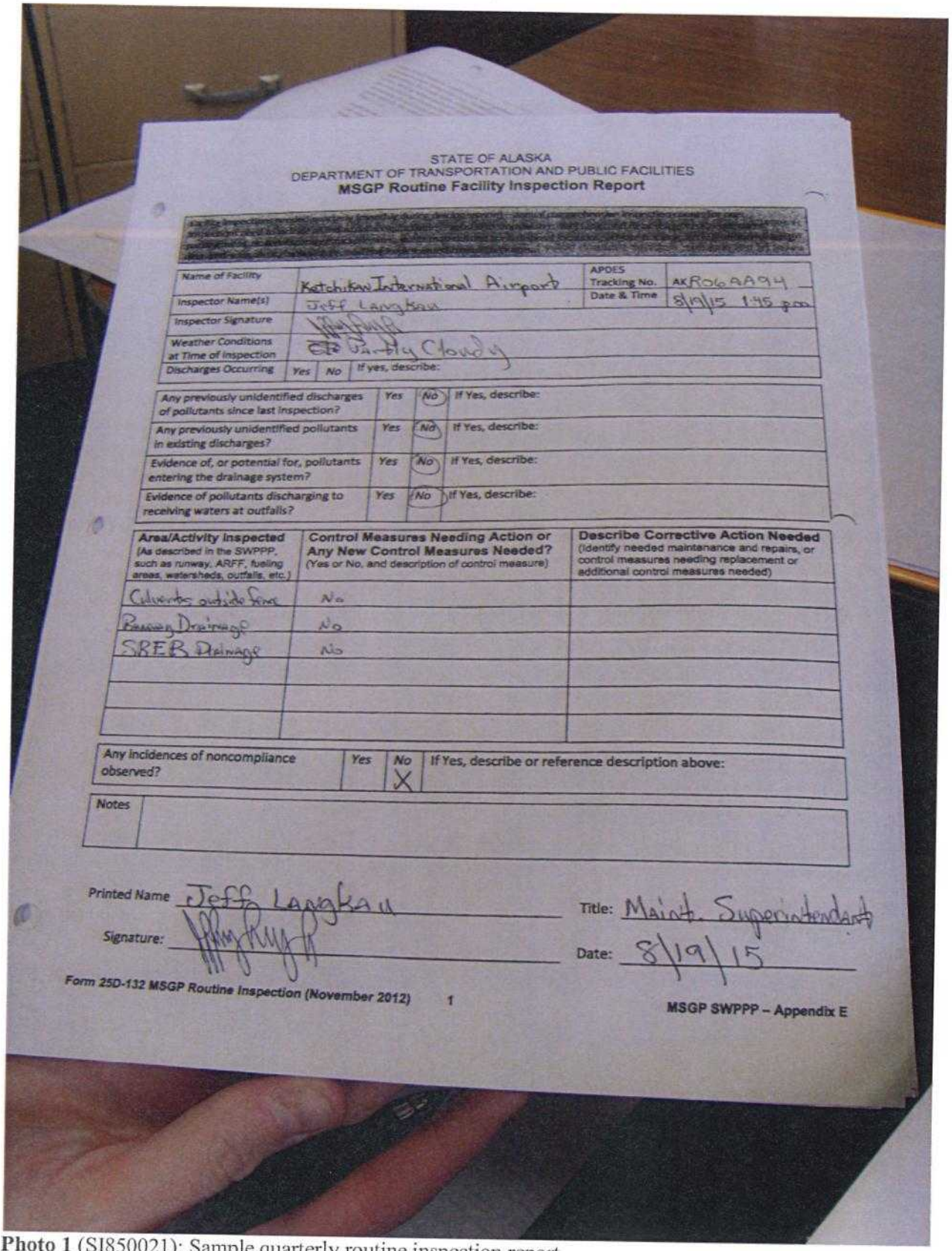
FIGURE 2

RESTORATION SCIENCE & ENGINEERING, LLC

ATTACHMENT B

Photo Log

(All photographs were taken by Brian Levo on 8/31/2015)



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
MSGP Routine Facility Inspection Report

Name of Facility	Ketchikan International Airport	APDES Tracking No.	AKR06AA94
Inspector Name(s)	Jeff Langkau	Date & Time	8/19/15 1:45 pm
Inspector Signature			
Weather Conditions at Time of Inspection	Partly Cloudy		
Discharges Occurring	Yes / No	If yes, describe:	

Any previously unidentified discharges of pollutants since last inspection?	Yes	No	If Yes, describe:
Any previously unidentified pollutants in existing discharges?	Yes	No	If Yes, describe:
Evidence of, or potential for, pollutants entering the drainage system?	Yes	No	If Yes, describe:
Evidence of pollutants discharging to receiving waters at outfalls?	Yes	No	If Yes, describe:

Area/Activity Inspected (As described in the SWPPP, such as runway, ARFF, fueling areas, watersheds, outfalls, etc.)	Control Measures Needing Action or Any New Control Measures Needed? (Yes or No, and description of control measure)	Describe Corrective Action Needed (Identify needed maintenance and repairs, or control measures needing replacement or additional control measures needed)
Culverts outside fence	No	
Runway Drainage	No	
SREB Drainage	No	

Any incidences of noncompliance observed?	Yes	No X	If Yes, describe or reference description above:

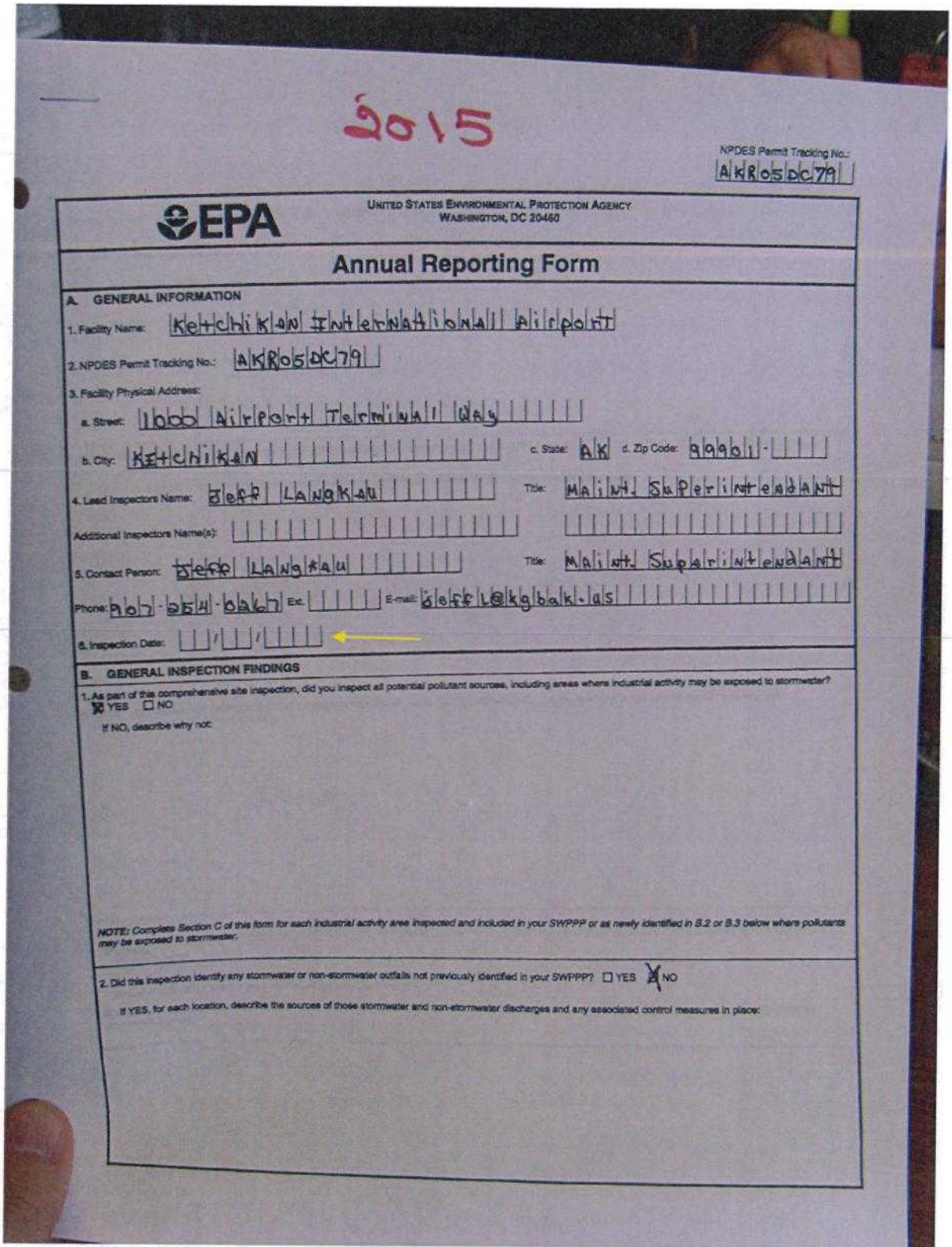
Notes	

Printed Name: Jeff Langkau Title: Maint. Superintendent

Signature: Date: 8/19/15

Form 25D-132 MSGP Routine Inspection (November 2012) 1 MSGP SWPPP – Appendix E

Photo 1 (SI850021): Sample quarterly routine inspection report.



2015

NPDES Permit Tracking No.: AKR05DC79

EPA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

Annual Reporting Form

A. GENERAL INFORMATION

1. Facility Name: Ketchikan International Airport

2. NPDES Permit Tracking No.: AKR05DC79

3. Facility Physical Address:

a. Street: 1000 Airport Terminal Way

b. City: Ketchikan c. State: AK d. Zip Code: 99901-

4. Lead Inspectors Name: Jeff Langkau Title: Maint. Superintendant

Additional Inspectors Name(s):

5. Contact Person: Jeff Langkau Title: Maint. Superintendant

Phone: 907-954-0467 Ext. E-mail: jeff.Langkau.as

6. Inspection Date: __/__/____

B. GENERAL INSPECTION FINDINGS

1. As part of this comprehensive site inspection, did you inspect all potential pollutant sources, including areas where industrial activity may be exposed to stormwater?
☒ YES ☐ NO

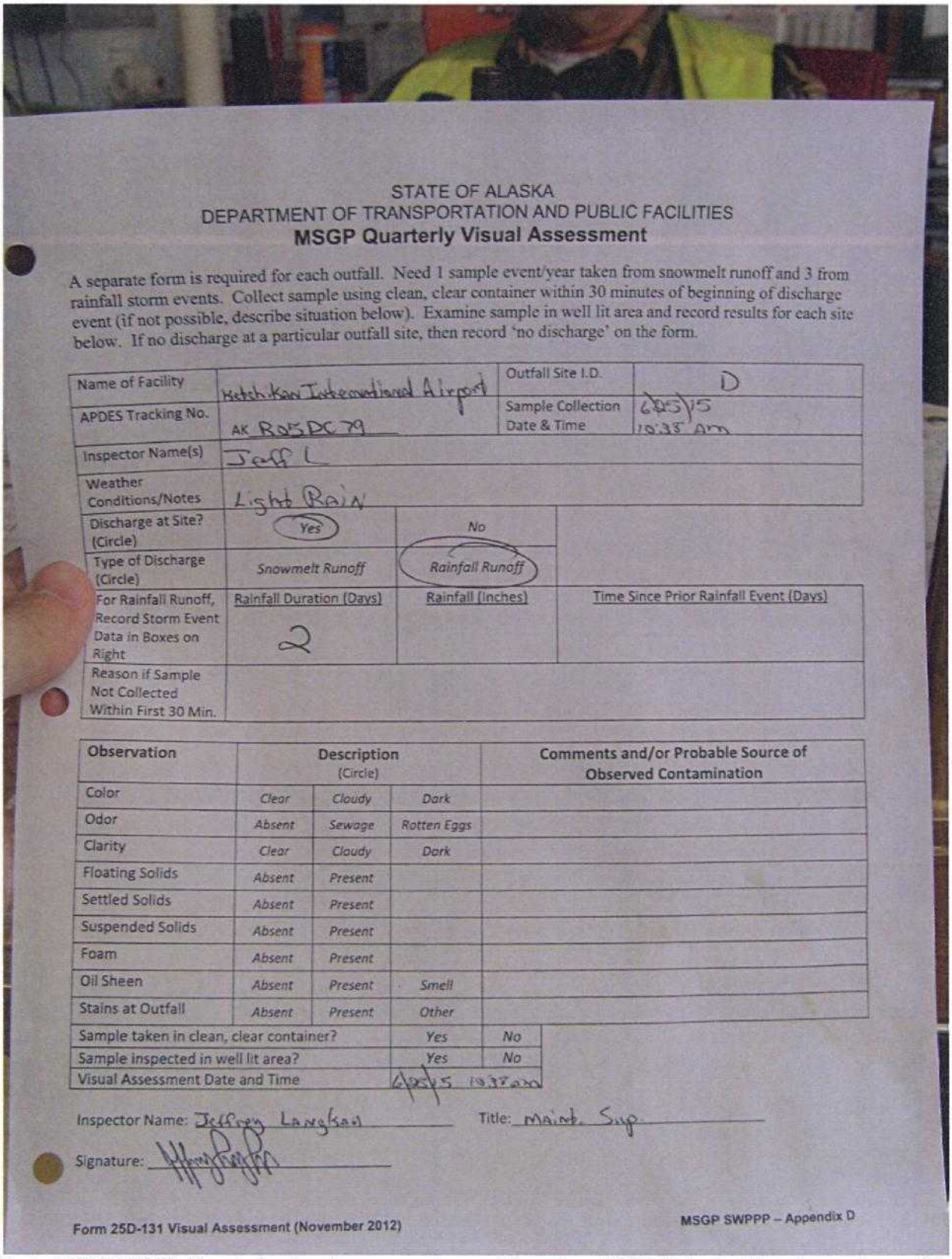
If NO, describe why not:

NOTE: Complete Section C of this form for each industrial activity area inspected and included in your SWPPP or as newly identified in B.2 or B.3 below where pollutants may be exposed to stormwater.

2. Did this inspection identify any stormwater or non-stormwater outfalls not previously identified in your SWPPP? ☐ YES ☒ NO

If YES, for each location, describe the sources of those stormwater and non-stormwater discharges and any associated control measures in place:

Photo 2 (SI850025): 2015 annual report. Note that the date of the comprehensive site inspection was not recorded (yellow arrow).



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
MSGP Quarterly Visual Assessment

A separate form is required for each outfall. Need 1 sample event/year taken from snowmelt runoff and 3 from rainfall storm events. Collect sample using clean, clear container within 30 minutes of beginning of discharge event (if not possible, describe situation below). Examine sample in well lit area and record results for each site below. If no discharge at a particular outfall site, then record 'no discharge' on the form.

Name of Facility	Ketchikan International Airport	Outfall Site I.D.	D
APDES Tracking No.	AK R05DC79	Sample Collection Date & Time	6/25/15 10:35 AM
Inspector Name(s)	Jeff L		
Weather Conditions/Notes	Light Rain		
Discharge at Site? (Circle)	Yes	No	
Type of Discharge (Circle)	Snowmelt Runoff	Rainfall Runoff	
For Rainfall Runoff, Record Storm Event Data in Boxes on Right	Rainfall Duration (Days): 2	Rainfall (Inches):	Time Since Prior Rainfall Event (Days):
Reason if Sample Not Collected Within First 30 Min.			

Observation	Description (Circle)			Comments and/or Probable Source of Observed Contamination
Color	Clear	Cloudy	Dark	
Odor	Absent	Sewage	Rotten Eggs	
Clarity	Clear	Cloudy	Dark	
Floating Solids	Absent	Present		
Settled Solids	Absent	Present		
Suspended Solids	Absent	Present		
Foam	Absent	Present		
Oil Sheen	Absent	Present	Smell	
Stains at Outfall	Absent	Present	Other	

Sample taken in clean, clear container?	Yes	No
Sample inspected in well lit area?	Yes	No
Visual Assessment Date and Time	6/25/15 1035 AM	

Inspector Name: Jeffrey Langstaff Title: Maint. Sup.

Signature:

Form 25D-131 Visual Assessment (November 2012) MSGP SWPPP – Appendix D

Photo 3 (SI850022): Quarterly visual assessment report from June 2015. Note that the observations of the discharge were not completed.

Photo 4 (SI850026): Two outfall pipes located at outfall E. According to Mr. Langkau, the darker pipe (red arrow) drains stormwater from the gravel areas surrounding the buildings in drainage area E. The lighter pipe drains portions of taxiway A (yellow arrow).

Photo 5 (SI850028): Sacks of dry urea used to make deicing solution stored inside the SRE building.

Photo 6 (SI850030): Totes containing 3% urea solution stored on the northeast side of the SRE building.

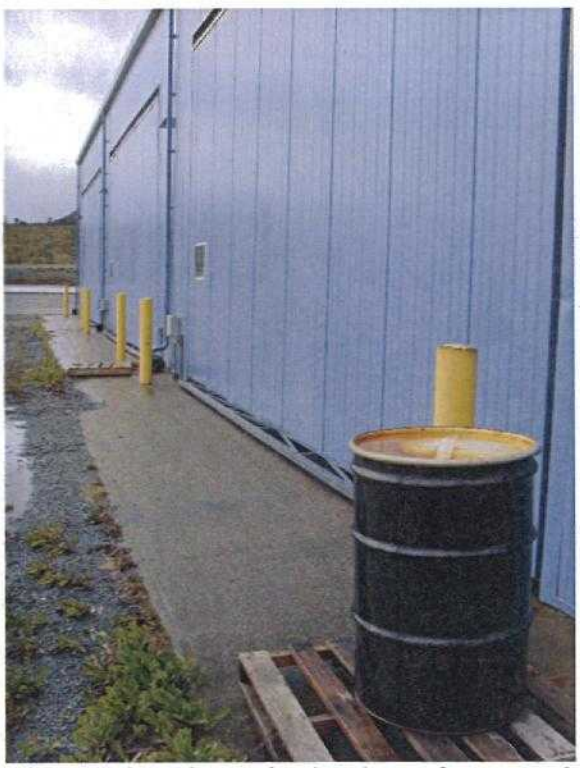


Photo 7 (SI850032): 55-gallon drum of antifreeze for the airport ferry stored outside without secondary containment at the east corner of the SRE building.

Photo 8 (SI850033): Stormwater drainage on the embankment to the east of the SRE building flowing to the Tongass Narrows. According to Mr. Langkau, some of the runoff from the yard on the east side of the SRE building flows down the embankment and enters a culvert that discharges outside the KIA fence line (yellow arrow).

Photo 9 (SI850036): Southwestern view of the east corner of the ARFF building.

Photo 10 (SI850037): Location of an oil-water separator near the east corner of the ARFF building. Mr. Langkau said that drainage from the vehicle shop bays inside the ARFF building are routed to the oil-water separator, but he was not sure if this drainage discharges from the oil-water separator. He said that they may discharge down the embankment and into the Tongass Narrows.

Photo 11 (SI850038): Close-up of the oil-water separator described in **Photo 10** above.

Photo 12 (SI850034): Pipe coming from the ARFF building dry bay and connecting to a larger metal pipe. According to Mr. Langkau, the larger pipe is filled in and no longer discharges. He said that no washdown or other vehicle fluids are routed through this system.

Photo 13 (SI850039): Fueling station with a spill kit (yellow arrow) located at the northwest side of the ARFF building.

Photo 14 (SI850040): A floor drain inside the ARFF building vehicle shop (yellow arrow). According to Mr. Langkau, this drain is routed to the oil-water separator buried near the east corner of the ARFF building.

Photo 15 (SI850042): A floor drain inside the ARFF building vehicle shop (yellow arrow). According to Mr. Langkau, this drain is routed to the oil-water separator buried near the east corner of the ARFF building.

Photo 16 (SI850043): Vehicle fluids stored inside the ARFF building maintenance area in proximity to the floor drain shown in **Photo 15**.

Photo 17 (SI850044): Approximate location of the outfall A sampling location.

Photo 18 (SI850045): Northwestern view of the runway in drainage area F. Mr. Langkau said that there is not a discrete conveyance of stormwater in this drainage area and the stormwater infiltrates. Two FAA buildings are located on the gravel parking area on the right side.

Photo 19 (SI850050): Eastern view of the Aeroservices tank farm. Note the storm drain next to the secondary containment (yellow arrow).

Photo 20 (SI850049): Western view of the Aeroservices tank farm. Mr. Langkau said that the lid located here was to an oil-water separator (yellow arrow).

Photo 21 (SI850048): Stormwater on the northeast side of the Aeroservices tank farm. The area along the fence line was slightly bermed, preventing stormwater from discharging past the fence.

Photo 22 (SI850051): View of outfall D (yellow arrow).

Photo 23 (SI850052): View of outfall B.

Photo 24 (SI850053): View of outfall C (yellow arrow).

Photo 25 (SI850054): Western view of the apron next to the KIA terminal in drainage area C. Mr. Langkau said that AS operations occur in this area.

ATTACHMENT C

Stormwater Pollution Prevention Plan

Storm Water Pollution Prevention Plan

for:

Ketchikan International Airport
1000 Airport Terminal Way
Ketchikan, Alaska 99901
(907) 225-6800

SWPPP Contact(s):

Ketchikan Gateway Borough
Ketchikan International Airport Director, Mike Carney
1000 Airport Terminal Way
Ketchikan, Alaska 99901
907-25-6800
Fax: 907-225-2939
Email: mikec@kgbak.us

SWPPP Preparation Date:

06/ 09 / 2015

APDES Permit Tracking Number: AKR06__ __ __ __

Contents

SECTION 1: FACILITY DESCRIPTION AND CONTACT INFORMATION

1.1 Facility Information

Facility Information

Name of Facility: Ketchikan International Airport

Street: 1000 Airport Terminal Way

City: Ketchikan State: AK ZIP Code: 99901

Borough or Similar Government Subdivision: Ketchikan Gateway Borough

Permit Tracking Number: N/A (if covered under a previous permit)

Latitude/Longitude (Use **one** of three possible formats, and specify method)

Latitude:

1. _ _ ° _ _ ' _ _ " N (degrees, minutes, seconds)
2. _ _ ° _ _ . _ _ ' N (degrees, minutes, decimal)
3. 55.35556 ° N (decimal)

Longitude:

1. _ _ ° _ _ ' _ _ " W (degrees, minutes, seconds)
2. _ _ ° _ _ . _ _ ' W (degrees, minutes, decimal)
3. 131.71361° W (decimal)

Method for determining latitude/longitude (check one):

☐ USGS topographic map (specify scale:_____) ☐ EPA Web site ☐ GPS

☒ Other (please specify): www.topozone.com

Is the facility located in Indian Country? ☐ Yes ☒ No

If yes, name of Reservation, or if not part of a Reservation, indicate "not applicable."_____

Is this facility considered a Federal Facility? ☐ Yes ☒ No

Estimated area of industrial activity at site exposed to storm water: 286.8 (acres)

Discharge Information

Does this facility discharge storm water into an MS4? ☐ Yes ☒ No

If yes, name of MS4 operator: _____

Name(s) of water(s) that receive storm water from your facility: Tongass Narrows and Government Creek

Are any of your discharges directly into any segment of an "impaired" water? ☐ Yes ☒ No

If Yes, identify name of the impaired water (and segment, if applicable):_____

Identify the pollutant(s) causing the impairment:_____

For pollutants identified, which do you have reason to believe will be present in your discharge? _____

For pollutants identified, which have a completed TMDL? _____

Are any of your storm water discharges subject to effluent guidelines? ☐ Yes ☒ No

If Yes, which guidelines apply? _____

Primary SIC Code or 2-letter Activity Code (refer to Appendix D of the 2015 MSGP): Primary SIC code 4581 – Airport Operations

Identify your applicable sector and subsector: Sector S, Subsector S1 – Air Transportation Facilities

1.2 Contact Information/Responsible Parties

Facility Operator (s):

Name: Ketchikan Gateway Borough
Title: Ketchikan International Airport
Address: 1000 Airport Terminal Way
City, State, Zip Code: Ketchikan, AK 99901
Telephone Number: 907-225-6800
Email address: mikec@kgbak.us
Fax number: 907-225-2939

Facility Owner (s):

Name: Alaska Department of Transportation and Public Facilities, Southeast Region
Address: 6860 Glacier Highway
City, State, Zip Code: Juneau, Alaska 99801
Telephone Number: 907-465-1784
Email address: greg.patz@alaska.gov
Fax number: 907-465-2021

SWPPP Contact:

Name: Mike Carney, Airport Director
Telephone number: 907-225-6800
Email address: mikec@kgbak.us
Fax number: 907-225-2939

1.3 Storm Water Pollution Prevention Team

Staff Names	Individual Responsibilities
Mike Carney, Airport Director	Oversight of airport operations; SWPPP Implementation
Jeff Langkau, Maintenance Superintendent	Airport operations; Control measures and corrective actions; routine facility inspections, quarterly visual assessments and annual comprehensive inspection and reporting.
SE Region M&O Environmental Analyst	SWPPP Development and initial facility inspection

1.4 Activities at the Facility

The Ketchikan International Airport is located on Gravina Island approximately 0.5 mile southwest of downtown Ketchikan, Alaska and consists of one runway, three taxiways, and two aprons. The airport is owned by the Alaska Department of Transportation and Public Facilities (ADOT&PF) and operated by the Ketchikan Gateway Borough (KGB). The ADOT&PF and KGB have two facility buildings involved in air transportation activities covered under this SWPPP: the Airport Rescue and Firefighting (ARFF) building, and the Snow Removal Equipment, Sand and Chemical Storage (SRE) Building.

The ARFF building is internally separated into two parts: the ARFF area and the maintenance shop area. The ARFF area contains two floor drains that lead to a catch basin in the concrete floor; the catch basin currently discharges to a French drain system under the gravel fill area east of the building. The maintenance shop area contains floor drains in the concrete floor lead to an oil/water separator and the outflow drains under the gravel fill area as well. There is also an emergency shower in the southeast corner of the building; under the shower is a floor drain which drains directly into the ground. ADOT&PF is working to bring these discharges into compliance.

The roof of the ARFF building is drained via gutters and downspouts that are piped into the ground, under the gravel area to the northeast of the building, and discharge to the heavily vegetated hillside east of the building.

The SRE building is internally separated into a sand storage area, an equipment storage area, two service bays, and a urea storage area. All areas in the SRE building, except for the sand storage area, have floor drains that discharge via underground piping to an underground 2,000-gallon holding tank located approximately 60 feet east of the building.

The SRE building also has roof drains. The roof drains on the north end of the building are assumed to discharge directly to the hillside northeast of the building. The roof drains on the west end of the building are connected to the catch basin system along Taxiway A, ultimately discharging to the heavily vegetated hillside located southeast of the building. The roof drains on the south end of the building are connected to the catch basin system for the building's parking lot, and ultimately discharge to the wetlands southeast of the building as well.

Industrial activities conducted by the KGB at the airport include equipment cleaning, storage, and maintenance; material storage; equipment fueling; and runway maintenance/deicing.

Equipment Cleaning, Storage and Maintenance Operations
KGB performs equipment cleaning, storage and maintenance in the SRE building and in the ARFF building.

Material Storage

Several materials associated with airport operations are stored by KGB at the Ketchikan International Airport, including the following.

- Approximately 80 tons of dry urea is stored in 1 ton supersacks in the SRE building.
- Liquid urea is stored inside the SRE building during the winter in a 7,500-gallon aboveground storage tank and a 4,500-gallon underground mixing tank.
- Approximately 100 cubic yards of sand is stored in the SRE building. Sand is used by KGB for application on roads and parking lots outside of the airport property fence.
- Ice melt (for use only outside of the airport fence) is stored in the SRE building in 50 pound sacks.
- Diesel fuel for equipment fueling is stored in a 4,000-gallon UST at a fueling station located on the northwest side of the ARFF building.
- Gasoline for equipment fueling is stored in a 1,500-gallon UST at the same fueling station.
- Heating oil for the SRE building is in a 2,000-gallon AST on the east side of the SRE building.
- Heating oil for the airport terminal is stored in a 4,000-gallon AST located on the southeast side of the terminal building.
- Lube oil, hydraulic oil, used oil, antifreeze, and paints are stored in the ARFF and SRE buildings.
- Aqueous film-forming foam (AFFF) is stored in drums in the ARFF building.
- Miscellaneous materials are stored within a connex on the southeast end of the property near FAA structures. These materials are stored temporarily at this location awaiting proper disposal.

Equipment Fueling Operations

KGB equipment fueling takes place at the fueling station located on the northwest side of the ARFF building. The station includes a 4,000-gallon diesel UST and a 1,500-gallon gasoline UST. The station is uncovered and consists of dispensers adjacent to a small paved pad surrounded by a gravel pad.

Runway Maintenance/Deicing

Runway maintenance at the Ketchikan International Airport includes painting, asphalt resealing, runway deicing and snow removal. Painting is limited to retouching runway markings annually. Asphalt resealing is limited to filling stress cracks in the asphalt surfaces annually. These activities are conducted in accordance with standard KGB and ADOT&PF procedures and require dry weather.

Runway deicing activities conducted by KGB personnel at the Ketchikan International Airport consist of the application of dry urea and liquid urea to the paved runway, apron and taxiways. KGB uses a total of approximately 50 tons of urea annually for deicing activities at the airport. Throughout the winter, facility maintenance employees plow the snow to the edge of roads, aprons, taxiways, and the runway.

Several tenants are located on the airport property; all are involved in air transportation-related activities such as air charter services or aircraft fueling operations. Tenants are responsible for gaining coverage under the MSGP if they determine that their operations meet permit requirements.

1.5 General Location Map

Include a copy of the general location map for this facility in Attachment A.

1.6 Site Map(s)

Include a copy of the site map for this facility in Attachment B.

SECTION 2: POTENTIAL POLLUTANT SOURCES

2.1 Industrial Activity and Associated Pollutants

Industrial Activity	Associated Pollutants
ADOT&PF snow removal	Hydraulic fluid, diesel fuel and antifreeze
ADOT&PF runway deicing	Urea
ADOT&PF material storage	Sand, lubricants, used oil, antifreeze, urea, salt
ADOT&PF equipment fueling	Diesel, gasoline
ADOT&PF equipment cleaning	Detergents, degreasers

2.2 Spills and Leaks

Areas of Site Where Potential Spills/Leaks Could Occur

Location	Outfalls
Runway 11/29	Outfalls A, B or G
Taxiway A	Outfall D
Taxiway B	Outfall B
Taxiway C	Outfall D
Airport Apron	Outfall C or D
Tie-Down Apron	Outfall D
Gravel pad containing ARFF and SRE buildings and fueling station	Outfall E

Description of Past Spills/Leaks

KGB has not had any significant spills or leaks at the Ketchikan International Airport in the past 3 years.

2.3 Non-Storm Water Discharges Documentation

- Date of evaluation: 3/27/13
- Description of the evaluation criteria used: Visual inspection of the airport, airport perimeter and outfall locations
- List of the outfalls or onsite drainage points that were directly observed during the evaluation: Culvert outfalls and Outfalls A, B, C, D, E, & G
- Different types of non-storm water discharge(s) and source locations: The ARFF area contains two floor drains that lead to a catch basin in the concrete floor: the catch basin currently discharges to a French drain system under the gravel fill area east of the building. The maintenance shop area contains floor drains in the concrete floor that lead to an oil/water separator and the outflow drains under the gravel fill area as well. There is also an emergency shower in the southeast corner of the building; under the shower is a floor drain which drains directly into the ground.
- Action(s) taken, such as a list of control measures used to eliminate unauthorized discharge(s), if any were identified. For example, a floor drain was sealed, a sink drain was re-routed to sanitary, or an NPDES permit application was submitted for an unauthorized cooling water discharge: ADOT&PF is working to bring these discharges into compliance.

2.4 Salt Storage

KGB stores ice melt in 50-pound sacks in the SRE building. The ice melt is used to deice the local roads and parking lots only, and is not used within the airport security fencing area.

2.5 Sampling Data Summary

KGB collected water samples from five locations at the Ketchikan International Airport on four occasions during the spring of 2013. Summaries of sampling results are below. Sample location 1 corresponds to Outfall A, sample location 2 corresponds to Outfall B, sample location 3 corresponds to Outfall D, sample location 4 corresponds to Outfall G, and sample location 5 was collected from the creek below Outfall G.

March 20, 2013 Results

Sample Location	pH	BOD	COD	Ammonia
1	8.04	<2.0 mg/L	nondetect	nondetect
2	7.95	<2.0 mg/L	nondetect	0.299 mg/L
3	7.58	<2.0 mg/L	nondetect	0.627 mg/L
4	7.99	<2.0 mg/L	nondetect	nondetect
5	7.08	<2.0 mg/L	nondetect	nondetect

March 26, 2013 Results

Sample Location	pH	BOD	COD	Ammonia
1	7.27	<2.0 mg/L	nondetect	0.133 mg/L
2	7.54	<2.0 mg/L	nondetect	0.693 mg/L
3	7.32	<2.0 mg/L	nondetect	0.272 mg/L
4	7.10	<2.0 mg/L	nondetect	0.143 mg/L
5	6.81	<2.0 mg/L	25.7 mg/L	0.149 mg/L

April 9, 2013 Results

Sample Location	pH	BOD	COD	Ammonia
1	7.07	<2.0 mg/L	nondetect	0.154 mg/L
2	7.46	<2.0 mg/L	nondetect	1.26 mg/L
3	7.30	<2.0 mg/L	nondetect	1.62 mg/L
4	6.89	<2.0 mg/L	nondetect	0.180 mg/L
5	6.61	<2.0 mg/L	22.5 mg/L	0.155 mg/L

April 17, 2013 Results

Sample Location	pH	BOD	COD	Ammonia
1	7.09	<2.0 mg/L	nondetect	0.125 mg/L
2	7.33	<2.0 mg/L	nondetect	0.692 mg/L
3	7.64	<2.0 mg/L	nondetect	0.888 mg/L
4	7.15	<2.0 mg/L	nondetect	0.163 mg/L
5	6.70	<2.0 mg/L	nondetect	0.102 mgL

The 2008 MSGP benchmark range for each of the analytes are:

pH	6.0 – 9.0 s.u.
BOD	30 mg/L
COD	120 mg/L
Ammonia	2.14 mg/L

The sample results from the Ketchikan International Airport outfalls were all below the benchmark ranges.

SECTION 3: STORM WATER CONTROL MEASURES

EPA refers to 'control measures' as any best management practice (BMP) or other methods (including non- numeric and numeric effluent limitations) used to prevent or reduce the discharge of pollutants to waters of the United States. KGB uses BMPs and source control measures for ongoing pollution prevention activities at the Ketchikan International Airport Facility.

3.1 Minimize Exposure

Minimize Exposure: KGB Equipment Cleaning, Storage and Maintenance Operations

Equipment Cleaning and Storage

Discharge of vehicle wash water to the storm drainage system is not allowed under the MSGP. KGB vehicles and equipment are washed in the ARFF and SRE buildings using phosphate-free biodegradable detergents. Personnel at the building are trained in the proper use of the wash area and are aware that wash water in the storm drainage system is prohibited. Vehicles and equipment are stored indoors at night.

BMPs to eliminate/minimize stormwater contact with equipment cleaning and storage activities include:

- Delineating organized work areas.
- Storage containers are housed inside the hangar or hazardous materials lockers.
- Equipment and vehicle wash only in designated facilities/areas.
- Wash water is not allowed to enter storm water drainage system.

Equipment Maintenance Operations

Ketchikan International Airport utilizes covered facilities to protect key stormwater pollutant-generating activities from pollutant mobilization to surface waters. Maintenance is conducted under cover within the ARFF and SRE buildings using absorbents, duck ponds, and secondary containment.

Emergency maintenance, if required, will be conducted over duck ponds and/or drip pans. KGB policy is to conduct as many pollutant producing activities within covered and contained facilities as possible.

BMPs to eliminate/minimize stormwater contact with maintenance activities include:

- Maintenance activities are conducted indoors when possible.
- Drip pans, duck ponds, or absorbents are used to collect fluids indoors and outdoors.

Minimize Exposure: KGB Material Storage

KGB's primary material storage BMP is storing all materials indoors.

Minimize Exposure: KGB Equipment Fueling Operations

BMPs to minimize fueling operations exposure to stormwater include the following:

- Report any spill exceeding ADEC threshold quantities (See Section 3.4 of this SWPPP).
- Use fueling hoses with check valves to prevent hose from draining after filling.
- Provide spill kits on vehicles, equipment, at fueling station, and in the facility. Each kit should be properly stocked and maintained.
- Used materials should be stored in an individual sealed container and labeled to ensure proper handling and disposal as a hazardous material.
- Keep spill cleanup materials readily available.
- Clean up spills and leaks immediately.
- Use dry cleanup methods for fuel areas. Sweep up sorbents as soon as spilled substances have been absorbed.
- Use spill and overfill protection devices.
- Provide curbing or posts around fuel pumps to prevent collisions from vehicles.
- Regularly inspect and perform preventative maintenance on fuel storage tanks to detect potential leaks before they occur.
- Inspect the fueling area for leaks and spills.
- Do not allow "topping off" of the fuel in the receiving equipment.

- Train personnel on vehicle fueling BMPs.

Minimize Exposure: KGB Runway Maintenance/Deicing
KGB uses urea at the Ketchikan International Airport for deicing the taxiways, aprons and the runway to remove and prevent ice buildup on the runway. The following BMPs minimize impacts to stormwater during the deicing season:

- Store deicing chemicals inside.
- Plow runways prior to the application of deicing chemicals
- Mix deicing chemicals inside under cover.
- Utilize anti-icing operations that minimize the need to apply chemical deicers.
- Ensure the proper handling and disposal of unused deicing chemicals.

Snow Management
Throughout the winter facility maintenance employees plow the snow to the edge of the roads, aprons, taxiways, and runway. Spills in snow will be handled on a case-by-case basis in accordance with ADEC requirements.

The following are exposure-minimizing BMPs for snow plowing:

- Snow is pushed off impermeable surfaces into permeable areas where it will infiltrate as it melts.
- Runoff from melting snow does not contribute to erosion, and is expected to infiltrate or be filtered through vegetated swales and natural vegetation surrounding the facility. If erosion is observed, snow management practices will be altered to prevent such occurrence.

3.2 Good Housekeeping

General good housekeeping practices for waste materials at the Ketchikan International Airport Facility include:

- Routine inspection of all exterior dumpsters and surrounding area for trash
- Routine cleaning of debris and waste from facility area
- Interior storage and regularly scheduled removal of hazardous waste or off-spec hazardous materials.

Additionally, loose waste materials are not acceptable around the facility due to the risk of them becoming foreign object debris (FOD) and a risk to aircraft safety (also see Section 3.11 of this SWPPP).

Good Housekeeping: KGB Equipment Cleaning, Storage and Maintenance Operations
Personnel at the Ketchikan International Airport conduct preventative maintenance of equipment to prevent spills/leaks onto ground and into stormwater run-off. All preventative maintenance of ground equipment and vehicles is conducted indoors.

Good Housekeeping: KGB Material Storage
Material storage housekeeping practices include storing materials indoors or in covered storage areas. Other material storage housekeeping practices include plainly and clearly labeling all stored fluids, secondary containment of any hazardous fluid storage, and maintenance of the hazardous materials recovery supplies in an identified area.

Good Housekeeping: KGB Equipment Fueling Operations
Fueling practices include using the 4,000-gallon diesel UST and the 1,500-gallon gasoline UST

located on the northwest side of the ARFF building to fuel KGB equipment. Vehicles and equipment are driven or transported to the dispenser to be filled. Spill kits are located onsite in the ARFF building. Personnel conducting fueling are trained in safe fueling procedures, and are familiar with the facility spill response plan.

BMPs for good housekeeping measures associated with equipment fueling operations include:

- Prepare a Spill Prevention, Control and Countermeasure (SPCC) plan for the facility.
- Store spill kit adjacent to the fuel tanks.
- Check that the fuel hose on the tank features a check valve to prevent the hose from draining after filling.
- Train personnel conducting fueling in safe fueling procedures and the facility spill response plan.

Good Housekeeping: KGB Runway Maintenance/Deicing
The Ketchikan International Airport uses urea for runway deicing to remove and prevent ice buildup on the runway. Dry urea is stored within the maintenance building in 1-ton supersacks. During the winter months, liquid urea is stored in a 4,000-gallon storage tank inside the SRE building.

Snow Management
Equipment operators are trained in stormwater pollution prevention and are trained to be vigilant and look for trash and evidence of spills or leaks while plowing. Trash is collected and properly disposed of prior to plowing. The good housekeeping BMPs for snow plowing include:

- Area is inspected for trash prior to expected snowfall events.
- Trash that melts out of snow piles is collected to prevent transport offsite; this requires daily monitoring of on-site snow during break-up conditions.

3.3 Maintenance

KGB vehicles and equipment are regularly inspected for leaks and other maintenance needs. No aircraft maintenance is conducted by KGB at the facility. Maintenance activities may include work on hydraulic systems, engines, batteries, painting, and vehicle and equipment washing. All KGB maintenance activities at the Ketchikan International Airport are accomplished indoors or offsite.

KGB's primary objective for preventive maintenance is to prevent pollution caused by improperly functioning equipment. Equipment that is maintained in good working condition is less likely to drip or spill fluids, such as lubricants or fuel, onto areas where these pollutants could be mobilized in stormwater runoff and transported off-site. Spills associated with indoor maintenance will not mix with stormwater or snow accumulation.

Preventive maintenance activities include the following:

- Regularly inspecting and maintaining vehicles, ASTs, secondary containments, and equipment for leaks.
- Regularly inspecting and maintaining structural control equipment for effectiveness in preventing stormwater discharges.
- Documentation of maintenance and repairs of KGB vehicles and equipment.

3.4 Spill Prevention and Response

Structural Controls (Inspection Procedures)

Tanks, lines and pumps are inspected daily when employees are onsite and in accordance to the site spill response plan. Spill kits are staged beside the airport terminal AST and in the ARFF and SRE buildings, and all oil-handling employees are trained annually in spill prevention, control and countermeasures.

Container Labeling

All containers with new products are labeled with the manufacturer's labeling. Container labeling is standard operating procedure at the airport and all containers are labeled when generated. Containers such as drums are labeled with USED OIL or Non-Hazardous Waste labels. No hazardous waste is generated during airport maintenance and operational activities. All tank containers are labeled with both the product type and tank number.

Preventative Measures

The facility's ASTs are double-walled tanks, and bollards surround the tanks to provide additional spill protection. Spill kits are located near the terminal AST and inside the ARFF and SRE buildings. Used oil from equipment maintenance is stored indoors.

Spill Response Materials

Spill kits are located near the terminal AST and inside the ARFF and SRE buildings.

Spill Response Procedures

1. Identify the product or material discharged.
2. Minimize the risk to the health and safety of people involved or in the vicinity of the incident.
3. Minimize the impact to the environment by stopping the discharge and controlling the spread of discharged material.
4. Provide for cleanup and mitigation of the affected environment to the satisfaction of state and federal agencies with oversight or jurisdiction.
5. Report the spill to your supervisor. If the spill is a reportable quantity (see below), KGB will need to notify the Alaska Department of Environmental Conservation (ADEC) Response Team. Even if the spill is not reportable, log the spill and KGB response in the spill response plan document and in this SWPPP (Appendix E).

Discharge Notification and Reporting Procedures

Per *AS 46.03.755 and 18 AAC 75 Article 3*

The facility supervisor will follow these notification and reporting procedures in case of a discharge on site:

Hazardous Substance Discharges
Any release of a hazardous substance must be reported to ADEC as soon as the person has knowledge of the discharge.

Oil Discharges
Release to Water

- Any release of oil to water must be reported to ADEC as soon as the person has knowledge of the discharge.

Release to Land

- Any release of oil in **excess of 55 gallons** must be reported to ADEC as soon as the person has knowledge of the discharge.
- Any release of oil in **excess of 10 gallons but less than 55 gallons** must be reported to ADEC within 48 hours after the person has knowledge of the discharge.
- A person in charge of a facility or operation shall maintain, and provide to the ADEC on a monthly basis, a written record of any discharges of oil **from 1 to 10 gallons**.

Release to Impermeable Secondary Containment Areas
Any release of oil **in excess of 55 gallons** must be reported within 48 hours after the person has knowledge of the discharge.

Alaska Department of Environmental Conservation 24-hour Emergency Reporting Number: 1-800-478-9300

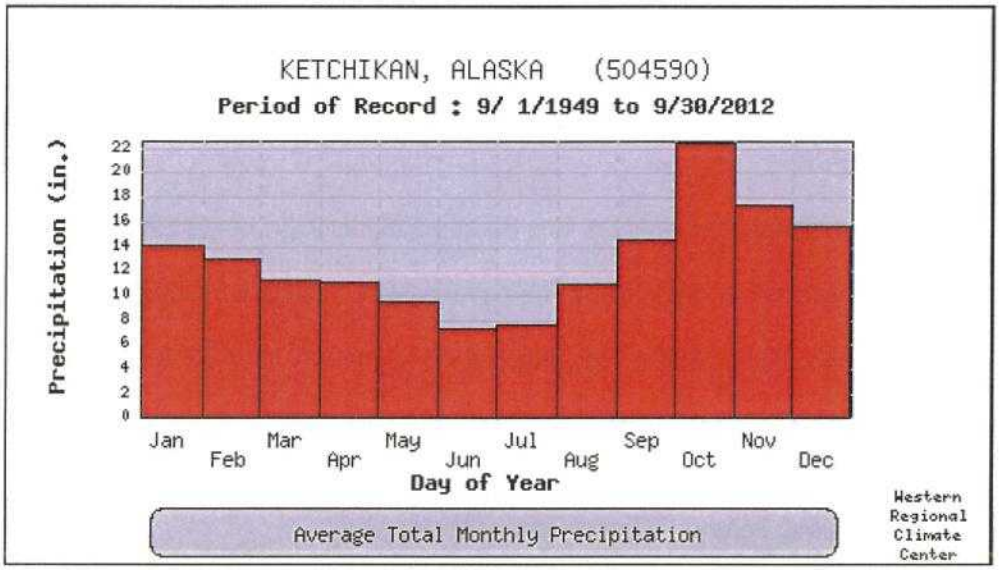
3.5 Erosion and Sediment Controls

Significant potential for erosion is minimal at the Ketchikan International Airport due to asphalt and gravel surfacing, and the presence of an extensive culvert and vegetated drainage ditch system on site.

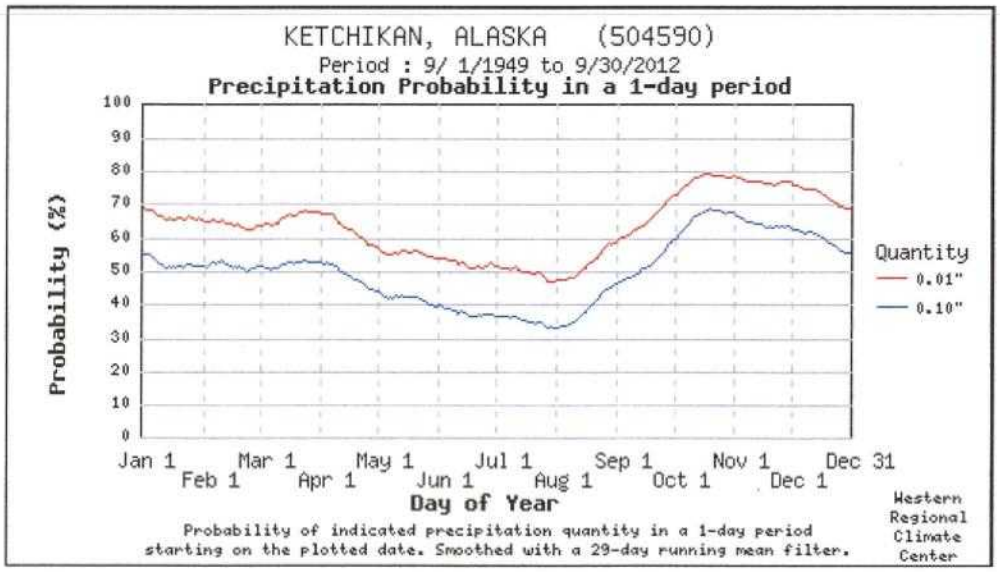
3.6 Management of Runoff

The stormwater runoff at the Ketchikan International Airport generally drains off the impervious areas through vegetated areas or gravel pads and either infiltrates there or sheetflows into nearby drainage ditches. In the winter, the runway and apron are plowed to the edge of the pavement. BMPs for management of runoff include vegetated buffers; use of energy dissipaters such as vegetation, rock armor, and check dams; and use of permeable infiltration areas adjacent to impermeable areas.

Precipitation Information
The following figures from the Western Regional Climate Center display the average total monthly precipitation and the probability of receiving 0.10" of precipitation in Ketchikan. On average, October and November are the wettest months in Ketchikan, totaling between 17 and 22 inches of precipitation each month. Freezing temperatures can begin in October and persist until March.



The following figure displays the probability of precipitation occurring on a daily basis and provides helpful information needed for predicting storm events. Refer to Section 6.1 of the MSGP for more information regarding storm events and sampling schedules.



3.7 Salt Storage Piles or Piles Containing Salt

KGB stores ice melt in 50-pound sacks within the SRE building.

3.8 MSGP Sector-Specific Non-Numeric Effluent Limits

8.S.3.1.1 – Aircraft, Ground Vehicle and Equipment Maintenance Areas: See Section 3.1 through 3.4 of this SWPPP.

8.S.3.1.2 – Aircraft, Ground Vehicle and Equipment Cleaning Areas: See Section 3.1 through 3.4 of this SWPPP.

8.S.3.1.3 – Aircraft, Ground Vehicle and Equipment Storage Areas: See section 3.1 through 3.6 of this SWPPP.

8.S.3.1.4 – Material Storage Areas: See Section 3.1 through 3.6 of this SWPPP.

8.S.3.1.5 – Airport Fuel System and Fueling Areas: See Section 3.1 through 3.6 of this SWPPP.

8.S.3.1.6 – Source Reduction: See Section 3.1 through 3.6 of this SWPPP.

8.S.3.1.7 – Management of Runoff: See Section 3.1 through 3.6 of this SWPPP and Section 2.1.2.6 of the MSGP.

8.S.3.2 – Deicing Season: Typically October through April.

3.9 Employee Training

Stormwater training for Ketchikan International Airport staff occurs annually and coincides with an inspection of the airport facility. Training will include any updates to the MSGP requirements, procedures for Routine Facility Inspections, Quarterly Visual Assessments, Comprehensive Site Inspections, and discussion of operational activities at the airport. Training for facility staff will also include spill reporting procedures. New staff will be trained on an as-needed basis. Blank staff training logs are included in Appendix I. File completed training logs in Appendix G.

Specific facility personnel stormwater training includes:

- Awareness of potential stormwater pollutants (sediment, oil sheen, snowmelt debris, trash etc.)
- Pollution prevention procedures, including BMPs, spill pans/pads under equipment, and secondary containment
- Assessment of potential adverse stormwater impacts (erosion, impact to adjacent wetlands and water bodies)
- Lines of communication, chain-of-command and Pollution Prevention Team

3.10 Non-Storm Water Discharges

See Section 2.3 for discussion.

3.11 Waste, Garbage and Floatable Debris

Inspections by KGB personnel will identify waste, garbage, or floatable debris in drainage areas and these articles will be removed for off-site disposal. As a standard airport practice, FOD is policed immediately upon observation to prevent potential safety issues related to aircraft traffic and flight operations.

3.12 Dust Generation and Vehicle Tracking of Industrial Materials

Airport runway, taxiways and apron areas are paved and do not produce dust.

SECTION 4: SCHEDULES AND PROCEDURES FOR MONITORING

The Ketchikan International Airport Facility is covered under Sector S: Air Transportation of the 2008 MSGP. Benchmark monitoring is required for Sector S industrial facilities that use more than 100,000 gallons of glycol-based and/or 100 tons or more of urea deicing chemicals per year.

The KGB uses approximately 50 tons of urea annually at the Ketchikan International Airport. The annual urea usage is less than the threshold amount of 100 tons and therefore the airport is not required to conduct analytical monitoring of the outfalls (MSGP Part 8.S.6).

For each type of monitoring, your SWPPP must include a description of:

1. **Sample Location(s).** Describe where samples will be collected, including any determination that two or more outfalls are substantially identical. Outfalls A, B, C, D, E, G.

2. **Pollutant Parameters to be Sampled**. Include a list of the pollutant parameters that will be sampled and the frequency of sampling for each parameter. Examine samples visually for the presence of color, floating solids, foam, odor, settled solids, oil sheen, clarity, suspended solids, indicators of stormwater pollution.

3. **Monitoring Schedules.** Include the schedule you will follow for monitoring your storm water discharge, including where applicable any alternate monitoring periods to be used for facilities in climates with irregular storm water runoff (2015 MSGP, Part 7.1.6).

   Visual monitoring will be conducted during site inspections and performed on samples collected **within the first 30 minutes of an actual discharge from a storm event** and on discharges that occur **at least 72 hours (3 days) from the previous discharge.** The 72-hour (3-day) storm interval does not apply if it is documented that less than a 72-hour (3-day) interval is representative for local storm events during the sampling period. At least one of the quarterly visual assessments will be collected during a snowmelt event on samples taken during a period with a measurable discharge from site.

   If it is not possible to collect the sample within the first 30 minutes of discharge, the sample must be collected as soon as practicable after the first 30 minutes. Document reason samples were not taken within the first 30 minutes using the Deviations from Assessment or Monitoring Schedule Form provided in Appendix I. In the case of snowmelt, samples must be taken during a period with a measurable discharge from your site.

4. **Numeric Limitations**. List here any pollutant parameters subject to numeric limits (effluent limitations guidelines), and which outfalls are subject to such limits. Note that numeric limits are only included for Sectors A, C, D, E, J, K, L, and O. Does not apply.

5. **Procedures**. Describe procedures you will follow for collecting samples, including responsible staff who will be involved, logistics for taking and handling samples, laboratory to be used, etc.

   a. Collect and analyze a grab sample from the discharge in a colorless glass or plastic bottle.

   b. If possible, take a photograph of the discharges at the time of observation.

c. Assess the general appearance, as an indicator of contaminants, of the discharges for:

- ***Color*** – If the discharge has an unusual color, such as reddish, brown, or yellow hue, this may indicate pollutants or suspended sediment.
- ***Odor*** – If the discharge has a noticeable odor, for instance if it smells like gasoline fumes, rotten eggs, raw sewage, or solvents odor, or has a sour smell, this could be indicative of pollutants in the discharge.
- ***Clarity*** – If the discharge is not clear, but is instead cloudy or opaque, this could indicate elevated levels of pollutants in the discharge.
- ***Floating solids*** – If you observe materials floating at or near the top of the bottle, take note of what the materials appear to be.
- ***Settled solids*** – Wait about a half hour after collection, then note the type and size of materials that are settled at the bottom of the bottle.
- ***Suspended solids*** – Particles suspended in the water will affect its clarity, and color and could be attributable to pollutant sources at your facility.
- ***Oil sheen*** – Check the surface of the water for a rainbow color or sheen; this would indicate the presence of oil or other hydrocarbons in the discharge.
- ***Foam*** – Gently shake the bottle and note whether there is any foam.
- ***Other obvious indicators of stormwater pollution***

d. Record the results of visual assessments using the Quarterly Visual Assessment Form (Appendix I). File completed forms in Appendix D. Forms must be kept on file for the life of the permit.

e. If the visual sample indicates **ANY** contamination (is not clear and odorless), conduct further investigation. Inspect the area draining to the examined discharge to look for obvious sources of spilled oil, leaks, etc. Also evaluate exposed industrial materials and activities and areas where material handling activities occur. If a source is located, KGB must immediately conduct a clean-up of the pollutant source, and/or revise control measures to minimize the contaminant source.

f. Under no circumstances will these activities be engaged under unsafe conditions that may risk personnel health or safety.

Annual Comprehensive Inspections

For Sector S facilities, annual comprehensive inspections must occur once per year during the deicing season. Comprehensive inspection procedures follow requirements listed in Part 4.3.1 of the 2008 MSGP and include inspections of all areas of the facility where industrial materials and industrial activities are exposed to stormwater; potential spill or previous spill areas (if any); all structural and source stormwater control measures; and a review of the past year's visual assessments. Comprehensive inspections are conducted by members of the PPT team and include examination of the following areas:

- Industrial materials, residue, or trash that may have or could come into contact with stormwater.
- Leaks or spills from industrial equipment, drums, tanks, and other containers.
- Offsite tracking of industrial or waste materials, or sediment where vehicles enter or exit.
- Tracking or wind transport of raw, final, or waste materials from areas of no exposure to exposed areas.

- Control measures needing replacement, maintenance, or repair. Stormwater control measures required by this permit must be observed to ensure that they are functioning correctly.
- Deicing areas and outfalls receiving deicing runoff.

If discharge locations are inaccessible, nearby downstream locations must be inspected. The annual comprehensive site inspection may also be used as one of the routine inspections, as long as all components of both types of inspections are included. Appendix I of the MSGP provides an annual comprehensive inspection form and is also available in Appendix I of this SWPPP.

Inspection and Assessment Schedules

The Ketchikan International Airport Facility is located in a climate with irregular stormwater runoff discharges and is subject to snowfall, freezing conditions, and adverse sampling conditions due to cold weather temperatures and high winds. Due to adverse and irregular climate conditions, visual assessments may not always be possible during the winter season, and will in some cases be supplemented by additional inspections/assessments occurring during the active spring, summer and fall seasons (April – October). Documentation of any inspection/assessment schedule deviations or replacement is required. A tentative inspection schedule, specific areas/outfalls to be inspected, and forms to be completed are identified in the table below and on the facility site map in Appendix A.

SWPPP Site Inspection Schedule

<table>
<tr><th>Quarter</th><th>Month</th><th>Deicing Season</th><th colspan="2">Minimum Inspection Schedule</th></tr>
<tr><td rowspan="3">1</td><td>January</td><td>X</td><td>Routine Facility Inspection</td><td rowspan="3">One Quarterly Visual Assessment during 1st quarter</td></tr>
<tr><td>February</td><td>X</td><td>Routine Facility Inspection</td></tr>
<tr><td>March</td><td>X</td><td>Routine Facility Inspection & Annual Comprehensive Site Inspection</td></tr>
<tr><td rowspan="3">2</td><td>April</td><td>X</td><td>Routine Facility Inspection</td><td rowspan="3">One Quarterly Visual Assessment during 2nd quarter</td></tr>
<tr><td>May</td><td></td><td>-</td></tr>
<tr><td>June</td><td></td><td>-</td></tr>
<tr><td rowspan="3">3</td><td>July</td><td></td><td colspan="2" rowspan="3">One Routine Facility Inspection during 3rd quarter One Quarterly Visual Assessment during 3rd quarter</td></tr>
<tr><td>August</td><td></td></tr>
<tr><td>September</td><td></td></tr>
<tr><td rowspan="3">4</td><td>October</td><td>X</td><td>Routine Facility Inspection</td><td rowspan="3">One Quarterly Visual Assessment during 4th quarter</td></tr>
<tr><td>November</td><td>X</td><td>Routine Facility Inspection</td></tr>
<tr><td>December</td><td>X</td><td>Routine Facility Inspection</td></tr>
</table>

The Ketchikan International Airport Facility SWPPP and completed forms will be maintained at the KGB office at the Ketchikan International Airport.

For the **routine facility inspections** and the **comprehensive site inspections:**

- *The name of the person, or the position of the person, responsible for inspection:*
  Airport Director
- *Specific areas of the facility to be inspected, including schedules for specific outfalls:*
  All developed areas and outfalls. Routine facility inspections will take place at least once each quarter, and monthly during the deicing season. At least once each calendar year, the routine facility inspection will be conducted during a period when a stormwater

discharge is occurring. Comprehensive site inspections will be conducted annually during the deicing season and are currently scheduled to occur in March.

For the **quarterly visual assessments**:

- *The name of the person, or the position of the person, responsible for inspection:* Airport Director
- *Specific areas of the facility to be inspected, including schedules for specific outfalls:*

Visual assessment samples will be collected from all outfalls and conducted during a period when a stormwater discharge is occurring. At least one assessment each year will capture snowmelt discharge.

Inactive and Unstaffed sites exception (if applicable)
If you are invoking the exception for inactive and unstaffed sites for benchmark monitoring, include information to support this claim.
None at this location.

Substantially identical outfall exception (if applicable) – DOES NOT APPLY.
If you plan to use the substantially identical outfall exception for your benchmark monitoring and/or quarterly visual assessment requirements, include the following information here to substantiate your claim that these outfalls are substantially identical:

- Location of each of the substantially identical outfalls: does not apply
- Description of the general industrial activities conducted in the drainage area of each outfall: does not apply
- Description of the control measures implemented in the drainage area of each outfall: does not apply
- Description of the exposed materials located in the drainage area of each outfall that are likely to be significant contributors of pollutants to storm water discharges: does not apply
- An estimate of the runoff coefficient of the drainage areas (low=under 40%; medium=40 to 65%; high =above 65%): does not apply
- Why the outfalls are expected to discharge substantially identical effluents: does not apply

SECTION 5: INSPECTIONS

For the routine facility inspections and the comprehensive site inspections to be performed at your site, include a description of the following:

- The names of the person(s), or the positions of the person(s), responsible for inspection: Airport Director
- The schedules to be used for conducting inspections. Include here any tentative schedule that will be used for facilities in climates with irregular storm water runoff discharges (2015 MSGP, Part 6.2.3): Routine facility inspections will be performed in the month of January, February, March, April, August, October, November and December. The comprehensive annual inspection will be performed in March.
- Specific areas of the facility to be inspected, including schedules for specific outfalls: All developed areas and outfalls. Routine facility inspections will take place at least once each quarter, and monthly during the deicing season. At least once each calendar year, the routine facility inspection will be conducted during a period when a stormwater discharge is occurring. Comprehensive site inspections will be conducted annually during the deicing season and are currently scheduled to occur in March.

For the quarterly visual assessments to be performed at your site, include a description of the following:

- The names of the person(s), or the positions of the person(s), responsible for inspection: Airport Director
- The schedules to be used for conducting inspections. Include here any tentative schedule that will be used for facilities in climates with irregular storm water runoff discharges (2015 MSGP, Part 6.2.3): Quarterlies will be performed each quarter when weather conditions permit.

- Specific areas of the facility to be inspected, including schedules for specific outfalls: Visual assessment samples will be collected from all outfalls and conducted during a period when a stormwater discharge is occurring. At least one assessment each year will capture snowmelt discharge.

Inactive and Unstaffed sites exception (if applicable) -- DOES NOT APPLY
If you are invoking the exception for inactive and unstaffed sites for your routine facility inspections and quarterly visual assessments, include information to support this claim.
Does not apply.

SECTION 6: SWPPP CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: _____ Title: _____

Signature: _____ Date: _____

SECTION 7: SWPPP MODIFICATIONS

This SWPPP will be modified and updated, as necessary. A form to record modifications is provided in Appendix D as Attachment 8: SWPPP Amendment Log. If modifying the SWPPP in response to a corrective action required by Part 3.1, then the Section 8 certification statement will be re-signed in accordance with MSGP Appendix B, Subsection 11.A or 11.B.

SWPPP ATTACHMENTS

Attach the following documentation to the SWPPP:

Attachment A – General Location Map

Include a copy of your general location map in Attachment A.

Attachment B – Site Map

Include a copy of your site map(s) in Attachment B.

Attachment C – 2015 MSGP

Note: It is helpful to keep a printed-out copy of the 2015 MSGP so that it is accessible to you for easy reference. However, you do not need to formally incorporate the entire 2015 MSGP into your SWPPP. As an alternative, you can include a reference to the permit and where it is kept at the site.

Attachment D – Visual Assessments
Attachment E – Inspections
Attachment F – Corrections
Attachment G – Training
Attachment H – Annual Reports

ATTACHMENT D

2015 Comprehensive Site Inspection

2015

NPDES Permit Tracking No.: AKR05DC79

EPA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

Annual Reporting Form

A. GENERAL INFORMATION

1. Facility Name: Ketchikan International Airport

2. NPDES Permit Tracking No.: AKR05DC79

3. Facility Physical Address:

a. Street: 1000 Airport Terminal Way

b. City: Ketchikan c. State: AK d. Zip Code: 99901-

4. Lead Inspectors Name: Jeff Langkau Title: Maint. Superintendant

Additional Inspectors Name(s):

5. Contact Person: Jeff Langkau Title: Maint. Superintendant

Phone: 907-254-6067 Ext. E-mail: jeff.l@kgbak.us

6. Inspection Date: / /

B. GENERAL INSPECTION FINDINGS

1. As part of this comprehensive site inspection, did you inspect all potential pollutant sources, including areas where industrial activity may be exposed to stormwater?
☒ YES ☐ NO

If NO, describe why not:

NOTE: Complete Section C of this form for each industrial activity area inspected and included in your SWPPP or as newly identified in B.2 or B.3 below where pollutants may be exposed to stormwater.

2. Did this inspection identify any stormwater or non-stormwater outfalls not previously identified in your SWPPP? ☐ YES ☒ NO

If YES, for each location, describe the sources of those stormwater and non-stormwater discharges and any associated control measures in place:

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NOTE: Copy this page and attach additional pages as necessary

INDUSTRIAL ACTIVITY AREA 4:

1. Brief Description: Aero Services Tank Farm

2. Are any control measures in need of maintenance or repair? ☐ YES ☒ NO
3. Have any control measures failed and require replacement? ☐ YES ☒ NO
4. Are any additional/revised BMPs necessary in this area? ☐ YES ☒ NO

If YES to any of these three questions, provide a description of the problem: (Any necessary corrective actions should be described on the attached Corrective Action Form)

INDUSTRIAL ACTIVITY AREA _____:

1. Brief Description:

2. Are any control measures in need of maintenance or repair? ☐ YES ☐ NO
3. Have any control measures failed and require replacement? ☐ YES ☐ NO
4. Are any additional/revised BMPs necessary in this area? ☐ YES ☐ NO

If YES to any of these three questions, provide a description of the problem: (Any necessary corrective actions should be described on the attached Corrective Action Form)

INDUSTRIAL ACTIVITY AREA _____:

1. Brief Description:

2. Are any control measures in need of maintenance or repair? ☐ YES ☐ NO
3. Have any control measures failed and require replacement? ☐ YES ☐ NO
4. Are any additional/revised BMPs necessary in this area? ☐ YES ☐ NO

If YES to any of these three questions, provide a description of the problem: (Any necessary corrective actions should be described on the attached Corrective Action Form)

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D. CORRECTIVE ACTIONS

Complete this page for each specific condition requiring a corrective action or a review determining that no corrective action is needed. Copy this page for additional corrective actions or reviews.

Include both corrective actions that have been initiated or completed since the last annual report, and future corrective actions needed to address problems identified in this comprehensive stormwater inspection. Include an update on any outstanding corrective actions that had not been completed at the time of your previous annual report.

1. Corrective Action # ☐☐ of ☐☐ for this reporting period.

2. Is this corrective action:

- ☐ An update on a corrective action from a previous annual report; or
- ☐ A new corrective action?

3. Identify the condition(s) triggering the need for this review:

- ☐ Unauthorized release or discharge
- ☐ Numeric effluent limitation exceedance
- ☐ Control measures inadequate to meet applicable water quality standards
- ☐ Control measures inadequate to meet non-numeric effluent limitations
- ☐ Control measures not properly operated or maintained
- ☐ Change in facility operations necessitated change in control measures
- ☐ Average benchmark value exceedance
- ☐ Other (describe): _____

4. Briefly describe the nature of the problem identified:

5. Date problem identified: ☐☐/☐☐/☐☐☐☐

6. How problem was identified:

- ☐ Comprehensive site inspection
- ☐ Quarterly visual assessment
- ☐ Routine facility inspection
- ☐ Benchmark monitoring
- ☐ Notification by EPA or State or local authorities
- ☐ Other (describe): _____

7. Description of corrective action(s) taken or to be taken to eliminate or further investigate the problem (e.g., describe modifications or repairs to control measures, analyses to be conducted, etc.) or if no modifications are needed, basis for that determination:

8. Did/will this corrective action require modification of your SWPPP? ☐ YES ☐ NO

9. Date corrective action initiated: ☐☐/☐☐/☐☐☐☐

10. Date correction action completed: ☐☐/☐☐/☐☐☐☐ or expected to be completed: ☐☐/☐☐/☐☐☐☐

11. If corrective action not yet completed, provide the status of corrective action at the time of the comprehensive site inspection and describe any remaining steps (including timeframes associated with each step) necessary to complete corrective action:

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E. ANNUAL REPORT CERTIFICATION

1. Compliance Certification

Do you certify that your annual inspection has met the requirements of Part 4.2 of the permit, and that, based upon the results of this inspection, to the best of your knowledge, you are in compliance with the permit? ☒ YES ☐ NO

If NO, summarize why you are not in compliance with the permit:

2. Annual Report Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Authorized Representative Printed Name: Jeffrey L Langkan   Title: Maint. Superintendent

Signature: [signature]   Date Signed: 3/13/15